



# LATC MLT PROGRAM

## Clinical Student Guide

PREPARED BY MLT FACULTY

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## OVERVIEW

Congratulations, you have completed the didactic portion of your training and will be beginning your clinical practicum soon. We hope you will find your clinical to be a rewarding experience and will be eager and ready to enter the workforce upon graduation to fill one of the many openings that are available to you.

This guide serves to provide the information of importance for you clinical training and so you will know what is required of you. Although we will go over the sections with you before you start clinical, please keep it on hand at all times as it may be helpful to find the answers to your questions you may have. If not, please email and we will be glad to help you out.

Our practicums are available January – May (spring semester) and August – December (fall semester). The clinical is **18 weeks in length** and begins with Sim Lab at LATC - one week in Micro and one in Blood Bank. The remaining 16 weeks have been arranged for you to train at one site or may be split between 2 sites (clinic and hospital). You will complete 720 hours and will train in the following sections at the clinical site: General Lab Practice, Phlebotomy, Hematology/Hemostasis, Chemistry, Urinalysis and Body Fluids, Immunohematology/Transfusion Services and Microbiology.

Our Sim Lab is intensive training in Blood Bank and Microbiology. Samples are simulated (prepared by the instructors) and can be simple and straight-forward tests with routine results, or more complex requiring trouble-shooting and problem solving skills. We have found through surveys of past students that the Sim Lab has many benefits, including better preparation for the clinical rotation, teaching you to work more independently and gain a confidence that will help you ease into your clinical.

It is important for you to be aware of the NAACLS specific requirements for clinical practicums that must be met in order to maintain our accreditation.

1. Affiliation agreements will be completed with each clinical site and cover all the required NAACLS guidelines.
2. Each clinical site will appoint a clinical liaison (supervisor) to coordinate your clinical training. This is the person you should go to with questions.

Qualifications include:

- a. A medical laboratory professional who holds certification and licensure (if required by state) in the medical lab;
- b. Demonstrates proficiency and has adequate knowledge of the medical lab field;
- c. Has at least 1 year experience in the medical lab;
3. Other operational policies as stated in the Standards for Accreditation:
  - a. Section V, E: Service work by students in clinical settings must be noncompulsory (explained later in this document).
  - b. Section V, F: Students may not be substituted for regular staff during their clinical experience.
  - c. Section VIII B2: Learning Experiences: After demonstrating competency, students, with qualified supervision, may be permitted to perform procedures

If at any time you have questions/concerns, please contact us.

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## PROGRAM MISSION

The Medical Laboratory Technician (MLT) Program at Lake Area Technical College is dedicated to providing students with the knowledge and skills for success as an entry-level Medical Laboratory Technician.

## GOALS OF THE MLT PROGRAM

The MLT Program at Lake Area Tech will:

- a. Provide instruction responsive to the needs of the student.
- b. Graduate technically competent individuals ready to enter the laboratory workforce with entry level skills.
- c. Prepare graduates to take and pass ASCP BOC national certification exam.
- d. Maintain a NAACLS accredited program current in the field of laboratory medicine.
- e. Instill the importance of continuing education for medical laboratory professionals.

We desire to prepare technicians who are able to perform the job of an entry level MLT. To monitor this, every other year LATC will survey the employers of that year's graduates. Review of the results of this survey allow us to make changes to our curriculum when needed.

We also want to foster a professional, ethical attitude in our graduates. Measurement of this goal will occur in the same manner as in the above paragraph.

In addition, it is one of our goals to produce graduates capable of passing the national certification examination at the MLT level. We do feel, however, that this goal will arise naturally from the others. The program accreditation standards state that graduation from our program is not dependent on the student passing a national certification. We do encourage all of you to take the national certification examination.

## DESCRIPTION OF JOB-ENTRY LEVEL COMPETENCIES FOR MLTs

At job-entry level, the medical laboratory technician graduate will:

1. Possess the entry level competencies necessary to perform routine clinical laboratory tests in areas such as Clinical Chemistry, Hematology/Hemostasis, Immunology, Immunochemistry/Transfusion Medicine, Microbiology, Urine and Body Fluid Analysis and Laboratory Operations;
2. Collect and process biological specimens and other substances;
3. Recognize variables that can affect procedures and results (pre-analytical, analytical and post-analytical), and take appropriate actions when corrections are indicated;
4. Perform and monitor quality control within predetermined limits;
5. Perform preventive and corrective maintenance of equipment and instruments or refer to appropriate sources for repairs;

6. Process information to relate laboratory results to common disease processes, and to apply basic scientific principles when learning new techniques and procedures;
7. Apply principles of safety and comply with governmental regulations.
8. Train users and providers of lab services.
9. Demonstrate professional conduct and interpersonal communication skills with patients, laboratory personnel, other health care professionals, and the public;
10. Communicate sufficiently to serve the needs of patients, the public and members of the health care team.
11. Recognize the significance of the need for continuing education as a means of growth and maintenance of professional competence.

### MLT STUDENT CLINICAL LIAISON (SUPERVISOR)

Each clinical site will designate a Clinical Liaison will be designated for each clinical site to coordinate the clinical experiences for the student. The Clinical Liaison must:

1. Be a medical laboratory professional who demonstrates the ability to effectively coordinate the clinical experiences of the students;
2. Demonstrate knowledge of the program discipline;
3. Have at least one year experience as a medical laboratory professional;

The clinical liaison will be responsible for:

1. The overall coordination of the student's hospital training including coordination of the bench teaching being done at the hospital/clinic in all departments;
2. Scheduling of the student(s) through the various clinical areas of the laboratory;
3. Submitting to LATC a copy of the student's clinical rotation schedule.
4. Orientation of the student to the hospital and the laboratory.
5. Communication with the MLT Program faculty at LATC.
6. Oversight and verification of the student's clinical practicum checklists (signing to approve their documentation);
7. Daily verification of attendance records and documentation of disciplinary actions if needed (initialed each day for time of arrival and departure);
8. Oversight/administration of the Practicum Final Test and specified ASCP Practice Test purchased by the student;
9. Completion of the weekly evaluation for each student for the first 6 weeks or when needed [Supervisor's Weekly Evaluation](#) ; You may follow the link to see how you will be evaluated.
10. Completion of final evaluations at the completion of the practicum
  - a. Practicum 1 and 2 [MLT Practicum Surveys](#)
11. Participation in LATC MLT Advisory Board meetings.

Most supervisors routinely delegate some of these duties to other personnel involved in the bench instruction. However, the supervisor is responsible for the total operation of the educational experience in his/her clinical site.

**Refer to Appendix A: Practicum 1 and 2 evaluation questions** Please be sure to read the information on survey monkey concerning the grading scale.

### MLT CLINICAL INSTRUCTORS

Most of the employees of the lab act as clinical instructors at one time or another. **It is important for you to know which instructor is primarily assigned to supervise you in each department and**

**which other instructors will help.** Please be aware that there is more than one way to perform a test and that you will see this when working with different techs. It is a good idea to keep a notebook in your pocket to write down the ways to perform the procedures. This notebook is also beneficial in keeping track of what you have done each week.

### **MATERIALS NEEDED WHILE ON CLINICAL:**

- BOC Study Guide Enhanced 6th edition: Go to [www.ascp.org](http://www.ascp.org) and register to become a member (I believe membership is free). As a member, you will receive a discount for the book. At other times they have book sales too. If you need to use your financial aid to purchase the book, please check with the bookstore or ask them to order it for you.
- Health form (or vaccination information) [LATC Immunization Page](#)
  - i. Hepatitis B vaccine series, Tdap, MMR, Varicella (immunization or titer per clinical site's guidelines), two step TB test, Influenza vaccine
  - ii. Other tests/vaccinations as designated by clinical sites
  - iii. Physical if required by clinical site (Avera)
- Proof of liability insurance
- Certified Background check
- Sign a clinical agreement
- Sign the HIPAA form
- Proof of 100% on your safety tests

### **CLINICAL ORIENTATION**

The clinical liaison or their designee should be responsible in orienting you to the clinical site's policies. They may want to spend the first day or so with the student explaining the physical layout of the hospital/clinic and rules/regulations governing all hospital/clinic employees. Most sites provide a general orientation program for new employees, and may arrange for you to participate in this orientation.

Many of the following topics are items the students are interested in/should know when they are oriented to your lab and hospital:

1. Time cards (if used) or Attendance records
2. Where to park
3. Dress code (are you able to wear your LATC scrubs) /Name tags
4. Student's schedule (including holidays, the sick day policy, tardiness policy, who to notify when sick, important phone numbers, the possibility of week-end and night scheduling toward the end of the rotation). If you have any special requests for days off, this should be discussed with the clinical site right away. **Students must complete the full 18 weeks (720 hours) so any time taken off must be made up.**
5. Treatment of patients including specimen collection etiquette and confidentiality.
6. How to stay actively busy.
7. Telephone etiquette, taking messages, communications in general including responding to nurses, physicians, families, and patients.

8. Getting along with staff, problems with staff (i.e. what to do if two individuals each show the student how to perform a test and the performance is different), and responding to constructive criticism.
9. Specimen collection, when he/she will be performing phlebotomy, requisitions, tube labeling, isolation, acceptable vs. unacceptable specimens.
10. Reporting incidents.
11. Computer usage, logging on to the computer.
12. Abnormal results, getting approval to report tests, quality control/assurance.
13. Supplies and inventory (use the oldest reagent, etc), who to tell when he/she uses the last of something, reagent preparation.
14. Evaluations—who will be performing and when.
15. Critical values.
16. Student guidelines:
  - a. Hygiene/grooming (including perfume, hair, nails)
  - b. Initiative
  - c. Efficiency
  - d. Enthusiasm
  - e. Self-confidence
  - f. Responsibility
  - g. Professionalism (ethics and confidentiality)
  - h. Safety

## PROPOSED SCHEDULE FOR STUDENT ROTATION DURING INTERNSHIP

The schedule that follows separates the departments of the lab into Practicums I and II and suggests the amount of time that should be spent in each in a typical lab. However, we recognize that labs will vary. In order to get an adequate amount of experience in each department; the rotations in certain departments may need to be lengthened. In turn this means some department will need to be shortened accordingly.

<u>DEPARTMENT</u>	<u>WEEKS</u>	<u>Credits</u>	<u>HOURS</u>
<b>MLT 226 Practicum I</b> General Laboratory Practice (including phlebotomy) (1), Hematology (4), Chemistry (3), Urinalysis (1)	9 weeks	6 credits	360 hours
<b>MLT 231 Practicum II</b> Microbiology (Sim Lab +3 weeks Clinical), Immunology (1), Immunohematology (sim lab + 2 weeks Clinical) 1-week Rotating Departments Sim Lab	3 weeks Sim Lab @ LATC 6 weeks clinical site	6 credits	360 hours
<b>MLT 236 Practicum Correlation</b> Includes educational student assignments on the portal (weekly reports, rotation quizzes, case studies, monthly reports, etc)	0	1 credit	15 hours



## HOURS/ATTENDANCE/ETC.

To attain 720 hours, an intensive Sim Lab worth 3 weeks training will be completed at LATC, with the completion of the remaining hours at the clinical site. Each clinical site will arrange the hours and days that you are expected to train. Generally, we recommend that the training is based on a 40-hour week, Monday through Friday (8 hours a day). Depending on the clinical site, however, 10 hour shifts may be scheduled if the clinical site's staff works 10 hour shifts. Students must clear this with the clinical liaison. If 10 hour days are arranged, you will be scheduled for 4 days in that week. The "day off" may or may not be a Monday or Friday. This is up to the discretion of the clinical site's supervisor and should mirror the work schedule practice in place for the staff.

Some smaller laboratories are unable to schedule the student in just one department at a time. That is acceptable as long as the amount of time spent doing various tests is similar to the schedule on page 7.

Your daily hours are determined by when you start the day and includes up to two 15 minute breaks. A thirty minute lunch time should be provided for the student if the schedule includes morning and afternoon hours, but the  $\frac{1}{2}$  hour is not counted as student clinical time. For example, an 8 hour day will be completed when you begin at 0600, take a morning and afternoon 15 minute break and  $\frac{1}{2}$  hour lunch and leave at 1430.

We cannot recommend training over 40 hours per week. On certain occasions, you may not be able to leave precisely at the hour that you are scheduled to leave. Students are encouraged to mirror the staff work schedule and stay long enough to finish the test or activity that he/she are working on. Some clinical sites may have "slow" time in which you can study. Some sites will rarely have "slow" times. **You should be advised that when there are lab procedures to complete or daily maintenance activities available in the lab, that is your first priority.** Student study time should never be longer than one hour per day and you should be aware of any lab work that comes in. At no time should you be monitoring social networks or other non-school related websites. Study time is a privilege, not a right. Some days there will be no time for studying.

Students will occasionally request that they be allowed to train over 40 hours per week in order to "finish up" early. This will not be allowed. The clinical time has been shortened to the absolute minimum. The total number of hours must be completed in order for you to successfully complete the clinical training. Once a student starts at a facility, he/she will complete the clinical at that facility (exception if the site is lacking enough testing in an area, i.e. microbiology or blood banking). Since the clinical time has been shortened, all missed time (sick leave, etc.) must be made up. Also, no holidays will be given. If the student is allowed to take a holiday, he/she will make-up the hours.

## ABSENCE AND/OR SICK DAYS

Since we have shortened the clinical, we are not allowing any time off. Therefore, sick days will have to be made up. If you are sick, you must call the clinical site to let them know you will be absent. You should also notify your instructors at LATC. **This is extremely important.** We will consider sick days in excess of 5 during the 18 weeks cause for disciplinary action. Therefore if you have missed five days, LATC will be contacted. If any additional time is missed, the clinical site and LATC may terminate your clinical training. At this point, you will be dismissed from the MLT program. Another clinical facility will not be assigned to you. SICK DAYS ARE NOT VACATION DAYS, AND SHOULD



NOT BE USED AS SUCH. Dentist and doctor appointments should be scheduled after clinical training hours as well.

You can make up missed time either at the end of the internship or on weekends, holidays, or scheduled days off, as long as the clinical supervisor and site agree to it. Sometimes staffing or other concerns don't permit make-up time. The student must have approval before scheduling make-up times. All make-up time must be supervised.

You are expected to begin your clinical rotation at the time established by your schedule. Tardiness in excess of 1 hour will be considered a full day of unexcused absence. Three tardy incidences less than 1 hour will equal one full day of clinical absence. **In addition, early departures are not tolerated. Three early departures will be considered one unexcused absence.**

The clinical liaison or instructor will verify your attendance each day (upon arrival and when you leave) by initialing the form provided by the student. It is your responsibility to take this log to them and have them initial it. You will be uploading this record of your attendance to the monthly report forums at the end of each month.

## HOLIDAYS

With regard to holidays, we will leave it up to the clinical site as to what holidays you will/or will not be scheduled, however, any holidays given off will be made up, i.e. you will be responsible to fulfill 720 hours of clinical (which includes sim lab). If you take Christmas off, or don't work a holiday because your clinical site is closed, you will make up the time during your clinical training.

## GENERAL BEHAVIORAL OBJECTIVES FOR THE CLINICAL PRACTICUM

During the clinical practicum, you will be evaluated in all areas (psychomotor, cognitive and the affective (behavioral) area. The importance of these behaviors can't be stressed enough. It is often the affective behaviors that make a graduate an undesirable employee, even though he/she can perform the testing and may have the knowledge base. Because our goal is to produce employable, contributing members for the laboratory profession, our role as instructors includes guiding the student in obtaining the appropriate affective behaviors. In order to minimize subjectivity, it may be beneficial to ask two people per section (or per laboratory) to evaluate the student's behavioral activities. The minimum requirements for each objective are:

### 1. TIME MANAGEMENT

#### **The student:**

Is punctual; begins work in a timely manner; completes assignments within assigned time frames.

- A. Demonstrate time management skills by being punctual, minimizing absences to five days in the 18 week period, making up all absences, and staying for their full day's training (no leaving early). All absences **MUST** be called in to the lab staff prior to the absence. Sick days must only be used for illness, i.e. the sick student should not be seen out around town, shopping, at the movies, etc. If they are too sick to attend clinical, they are too sick to do anything else. Sick days are **NOT** vacation days.

## **2. WORKLOAD MANAGEMENT**

### **The student:**

Can organize work and produce required quantity of work with accuracy within the allotted time frame.

- A. Make the most of the clinical rotation, by reviewing and examining educational materials received during their didactic training prior to entering a department at the clinical site in order to prepare for the information given to them and requested of them during the rotation.
- B. Recognize that the ultimate responsibility of the Affiliate is for the care rendered to their patients, therefore all schedules and plans shall conform to the rules and regulations of the Affiliate. Any disregard of Affiliate policies will be grounds for dismissal. Students will be required to dress and act in accordance with the rules and regulations of the Affiliate.
- C. Demonstrate workload management by organizing and producing test results that are accurate within an appropriate amount of time (that expected by any other employees). The student will be expected to allow clinical staff to closely observe him/her while he/she performs tests. The student will accept constructive criticism without retort. The student will make every attempt to show enthusiasm for performance of daily work-load (will take initiative to perform tasks that he/she has already been trained in without prodding). The student will NOT challenge the laboratory staff. The staff are the experts; the student is there to learn—not teach!
- D. Limit maximum break time to the advised break times given employees at the institution. Breaks are the discretion of the institution—it is possible that some days will not include breaks. The student will always ask if a break is allowed. Students do not schedule their own breaks.

## **3. FACILITIES MANAGEMENT**

### **The student:**

Leaves work area clean and restocked; properly uses and maintains equipment; adheres to all published safety regulations in the laboratory.

- B. Demonstrate facilities management by leaving the work area clean and restocked. Properly uses and maintains equipment and adheres to all safety regulations in the laboratory.
- C. Computer usage must be authorized by the clinical affiliate. The computer is never to be used without authorization and then ONLY for transmitting tests, evaluations, and information to the MLT program at LATC or for obtaining information from the certification agencies. Searching Internet sites for personal use is FORBIDDEN.
- D. Cell phones should be left in the student's locker and/or purse. Social networking should not be utilized during training time. Personal calls and/or texts should not be taken during training time. No cell phones will be carried during clinical rotations.

## **4. PROFESSIONALISM**

### **A. The student:**

Willingly follows instructions and accepts professional constructive criticism regarding work; interacts with faculty and students in a professional manner, e.g., is polite, considerate, pleasant and unhurried.

- 1. Demonstrate professionalism by willingly following instructions and accepting constructive criticism regarding work; interacts with faculty and students in a professional manner, is polite, considerate, pleasant and unhurried.
  - a. The student will interact with faculty, staff, and patients in a professional manner, which means that he/she is polite, considerate, pleasant, not derogatory, courteous, etc. Any back-stabbing, back-talking, disloyal comments are grounds for dismissal.

- b. The student should never be boisterous, continually talking, interrupting others while working.
- c. **The student will NOT divulge any laboratory business, which includes personal information of the other laboratory staff; student opinions about the laboratory, the laboratory staff, other students and/or other laboratories; and/or patient information to others outside of the laboratory.**
- d. The student will ask for help when it is needed. The student is aware of his/her limitations.
- e. The student will adhere to the dress code of the clinical site. Standard professional appearance will be expected of all students.
  - i. Fingernails should be short. Avoid brightly colored nail polish. Artificial nails are strictly prohibited.
  - ii. Minimal perfume/after shave should be worn. Students should not smell of smoke. Personal hygiene must be maintained (no body odor). Many ill patients are unable to tolerate odors.
  - iii. Only two sets of earrings in the ear lobes. No other pierced body sites should have visible jewelry showing.
  - iv. No tattoos showing.
  - v. No hickeys—or make sure that they are covered by a shirt or makeup.
  - vi. Hair color should be reserved to colors such as brown, red, blonde, gray, white or black. No purples, greens, pinks or blues will be accepted.
  - vii. If jewelry/accessories are worn, they must be done so in moderation. Avoid excessive, dangling jewelry.
- 2. At no time will cheating (in written tests/quizzes or in technical testing procedures), being under the influence of drugs and/or alcohol, failure to maintain patient confidentiality, failure to report known errors to a supervisor, and untruthfulness in any areas of clinical concern be tolerated.
- 3. Profanity will not be tolerated.
- 4. The student will abide by the rules/policies of the institution. Many healthcare campuses are now tobacco free.
 

Cigarettes/tobacco will be left in the car off-campus. If at any point the student is in violation of the institutional policies (of any type, not just the tobacco rules), they may be dismissed from the clinical (and the program).

## **B. The student:**

Handles work in logical sequence; is fully aware of own limitations; seeks help when needed.

- 1. Demonstrate the appropriate priorities by using slow time in the laboratory to ask questions, review slides, read and practice new procedures, etc. Slow time is never to be used to read magazines or sit in the backroom gossiping. Phone calls, personal grooming, etc. should be handled on break-time. Laboratory time should not be used for these duties.
- 2. Demonstrate the ability to multi-task (after orientation to a department).
- 3. Asks for help when appropriate, but gains confidence in his/her abilities.
- 4. Defers to the judgments and criticisms of the clinical staff. Does not become defensive. Tries to utilize constructive criticism to improve.

*You will sign a contract with LATC and the clinical site that clearly states the above expectations.*

### Dismissal Guidelines:

The following will be grounds for dismissal from the Program. These are not all inclusive, but provide some examples of dismissal guidelines. **Once a student is dismissed from clinical, there will be no further opportunities to complete the MLT Program at LATC.**

1. Any proven evidence of deliberate cheating, falsifying laboratory results or cheating on exams.
2. Refusal to be rehabilitated after proven evidence of alcohol or illegal drug use while functioning as a student.
3. Failure to follow HIPAA policy. Disregard for the patient's right to confidentiality and privacy. Releasing patient information to unauthorized personnel, talking about patients in elevators, hallways, etc. in the presence of unauthorized personnel. Failure to log off of computer when stepping away.
4. Disregard for good quality patient care. Consistently inaccurate work and/or consistent careless attitude.
5. Disregard for rules, regulation, policies and procedures set forth by the clinical affiliate and/or Lake Area Technical Institute.
6. Disregard for safety procedures.
7. Poor attendance (unexcused absences), tardiness or failure to communicate absences with clinical faculty.
8. Continual refusal to perform lab work when asked to perform it, disagreeing or arguing with the staff at the clinical site, especially in the presence of patients.

## **ASSIGNMENTS WHILE ON CLINICAL**

### **Practicum 1 MLT 226 and 2 MLT 231:**

Each student will take two comprehensive final tests which will be scheduled on a designated day toward the end of the practicum. The idea behind the comprehensive finals is to keep you thinking about the theory/didactic material and to try to simulate what the certification exams may be like. The certification exam will be coming up shortly and we want you to be as prepared as possible. Students will be informed of the comprehensive test dates at least 2 weeks prior to the test. All clinical students will be required to take the comprehensive tests at the time scheduled. The tests will be on the Portal, but you will need an approved proctor to administer them (clinical supervisor or someone they recommend). Once you begin a final test, you must finish it. You will not have an opportunity to retake the tests so please do your best and be fully prepared before you begin.

Any work in preparation for these tests (completion of the BOC study guide and Medialab exam simulator Selected Areas tests) should be done outside of clinical hours unless workflow is slow and the clinical supervisor **encourages** the student to "study". These are your responsibilities and **must be completed prior to the comprehensive tests as each test is worth 20% of your clinical grade.**

**BOC Final Exam:** This comprehensive test includes questions from the BOC Study Guide you will purchase from ASCP. It is important that you complete all test questions and spend time going over the questions you got wrong to make sure you understand why they were wrong and why the correct answer was right. Remember that you are in the critical thinking stages now, so memorization does not work for all information you have learned. The test is not open book, but if you have completed and understand all of the questions in the book, you should do well. This test makes up 20% of your Practicum I and II grades.

### Medialab Exam Simulator:

1. Each student on clinical will be assigned a seat in the Medialab Exam Simulator.

[www.medialabinc.net](http://www.medialabinc.net)

2. Students will complete the 50 question Selected Areas exam on their own time. You can take the exam as many times as you want but only the first three attempts will count towards your Medialab score. The exam includes the areas of: blood bank, chemistry, hematology, immunology, laboratory operations, microbiology, and urinalysis/body fluids.

3. The Medialab Final Exam, "ASCP Board of Certification MLT Computer Adaptive Test" will be taken with a proctor the second to last week of the clinical rotation and includes all areas of the lab.

4. The grade you receive for the Medialab Exam Simulator is a combination of the three attempts on the Selected Areas exam and the ASCP BOC CAT exam. These four scores are averaged and this score makes up 20% of the Practicum I and II grades.

The remainder of your grade will be based on clinical site evaluations (including those from sim lab). The evaluations consist of Affective and Technical Evaluations. Affective evaluations are behavioral evaluations, while Technical Evaluations are psychomotor and deal with your ability to perform the tests in the lab. These evaluations will be kept in the MLT department for 5 years.

Affective Evaluation = 20%

Technical Evaluation = 40%

**Refer to Appendix A to see how you will be evaluated in Practicum 1 and Practicum 2**

### Practicum Correlation – MLT 236

You will be asked to complete weekly reports, rotation quizzes, case studies and monthly forum posts and uploads. Your grade in this course will be determined from these activities.

**Weekly Report Forum:** You will complete a report every week. Click on the weekly report, copy the text of the form, choose reply to the post and paste this form in your reply box. Continue by answering each section (the forum includes instructors and peers). A copy of the form is on the next page:

Week 19

Original post: Wed 1/3/2018 at 8:27 PM

Reply

Reply by Monday, May 7 at 23:55

Reply to other's replies by Thursday, May 10 at 23:55

Answer any student or instructor questions by Monday, May 14 at 23:55

MLT Student Weekly Report

Week #

Department(s):

Morale (how you are feeling):

Accomplishments for the week:

Goal for next week:

Daily Attendance (hours worked each day):

(i.e. 7 am – 3:30 pm, ½ hour lunch)

Monday

Tuesday

Wednesday

Thursday

Friday

Total number of hours:

Number of days absent this week:

Number of days tardy this week:

State One interesting things that happened this week and then discuss it (50 words minimum):

What is something new you learned this week. Please state what you learned and then discuss more about it (how it works, what it means, etc.). (50 words minimum - should not be a repeat of the answer used above):

When you report on something new you learned, please go into detail so others may learn from it too. It could be a test you never heard of before and why you are performing it (what condition it will detect) or a new procedure you performed and you can explain how to do it, etc. After the initial report due date, each student will reply to 2 other students (rotating who you reply to each week) by making a comment or ask a question if you want more information about something that was reported on. LATC instructors will also reply/ask questions. **Students will answer the questions posted to them and reply that they have read all the posts.** Please refer to bolded pink information in the image above to get an idea of when everything is due.

Each weekly report and replies are worth 5 points. Please follow the weekly report rubric (My Portal) to make sure you obtain all the points each week. Your post must be submitted on time **each** week. *What is meant by on time?* Each week will end on Friday. You will have until Monday (at 23:55) to fill out your report. If you fill it out on Tuesday, it is considered late **and you will not be awarded all the points for that report.** *But if you fill it out after that, you will still obtain some points as long as the reply is completed by the end of the week (Friday).* The reply to your peers should be completed by Thursday of that same week at 23:55. Replies to the instructors (or questions posted by your peers) should be completed by Monday of the following week at 23:55. The weekly report grade is worth 1/3 of your clinical correlation grade.

**Refer to Appendix F for an example of a weekly report.**

**Rotation Quizzes:** You will be assigned quizzes throughout your clinical in all the major areas of the lab (lab operations, hematology, BB, UA, Chemistry, Micro, Body Fluids and Immunology). Once a quiz is assigned, you will have a week to complete it. You can go in and out of the portal to work on each quiz until it is done as long as you submit it by the due date. If you don't submit the quiz, it will submit automatically when it closes. You are encouraged to use your books/notes as the goal of these quizzes is to enhance your learning and retention of the material. The quiz due dates are alternated with the case study due dates. This is worth 1/3 of the grade

**Case Study Forum:** This forum is comprised of student and instructor case studies. Each student will be responsible for preparing 1 case study from an area of study during their rotation. You will be assigned an area of the lab to obtain your case from as well as a due date for your case study. We would like the case to come from actual patients at your facility. Of course, you must remove all identifying features. Please give the patient history and data (any data must have normal values with units attached). Then ask 2 questions from this case study. The answers should not be present in your case study; we want each student to have to search to find the answer. After a student has submitted their case study, the other students will answer the case questions with complete sentences. After all students have replied, the creator of the case will discuss the case and give the answers. You will be graded on your case study presentation (2.5 points), your discussion of the case (2.5 points) and your answer to other's case studies (5 points for each). This will be worth 1/3 of your clinical correlation grade. **Please be sure to read the grading rubric so you are aware of all the requirements of the case study.**

**Refer to Appendix B for an example of a past student's case study.**

## IN THE EVENT OF A BLOOD OR BODY FLUID EXPOSURE

LATC has a post exposure plan that will be followed for all exposures that occur at the school. In the event an exposure should occur at the clinical site, the student must inform the clinical liaison (supervisor) and Kelsi or Kelly immediately (605-882-5284 Kelsi ext 285, Kelly ext 338). As all sites are different, each clinical site's policies for student training will dictate whose post exposure plan will be followed. We would like to follow our plan if that is possible. Whichever plan is chosen, LATC will pay for the testing involved if we have been informed, the student has done the testing when required and we receive the test results/bill from the student on a timely basis (within 6 months). Please read through the post exposure plan so you are familiar with it.

**Refer to Appendix C for a copy of LATC's post exposure plan**

## SERVICE WORK

Employment of the student by the clinical affiliate during the clinical practicum is not recommended. However, if the student is employed by the clinical affiliate, the work must be after regular education hours. The work should not interfere with the student's regular academic responsibilities, be noncompulsory, paid, and subject to all regular employee regulations. Students will not be paid during clinical hours.

## STUDENT MONTHLY ATTENDANCE EMAIL

You will be responsible for keeping track of your monthly attendance via the attendance logs we provide. They have a two-fold purpose. The first is to keep track of attendance by having your supervisor (or instructor you are working with) initial the form when you arrive and when you leave for the day. The second purpose is a way for the clinical site to inform you if there are deficiencies noted in your performance. Our goal is to advise students of these deficiencies so they can make corrections to improve and successfully complete the program. Should there be deficiencies, the clinical liaison will show a failure on the attendance log and write up an action plan (third page of the form) to help the student know what and how they should work on.

At the end of each month, you will be required to complete a monthly report and email it to all three of your instructors. We will have you include your attendance and Practicum Checklist forms at this time. At the end of clinical, you will complete final monthly report and upload **all** of the attendance logs with dates, the hours added up and signed. Submit your **completed** practicum competency list. Complete any additional assignments given. This will be required for graduation.

**\*Please make sure that you have obtained all the required signatures and that these forms are complete.**

**Refer to Appendix D for a copy of the attendance log**

## CLINICAL PRACTICUM COMPETENCY LIST

You will be responsible for completing a clinical practicum competency list. This list should be with you every day so you can keep track of the number of tests performed each day. This list shows which tests we would like you to perform. Once the competency has been completed, the student will



continue to perform the tests, as the learning process will still occur. We are aware that all sites may not perform all the listed tests, but want to have as comprehensive of a list as possible.

We will go over our expectations for the practicum competency list with you prior to clinical. It is important that have your clinical supervisor initial your list every month or at the end of each section for verification of completion of the tests. The students will upload the month's report to a monthly report forum which is required for graduation and will become a permanent record in their file. Once again, this will be uploaded at the end of the month and the COMPLETE list will be uploaded at the final monthly report.

**Refer to Appendix E for a copy of the clinical practicum competency list**

## PERSONNEL SITUATIONS

*If, during your clinical, you encounter bullying or a situation in which someone is demonstrating unprofessional behavior toward you (belittling you, berating you, shouting, or cursing), you should say, "This is making me feel uncomfortable and I am leaving immediately to talk to my clinical liaison about this situation." Leave and seek out your clinical liaison (supervisor). If your s/he is not on the premises, call Kelsi (605-882-5284 ext 285), Kelly ( ext 338) immediately and we will help you handle the situation.*

*Remember, there is a difference between constructive criticism and bullying. **The above does not apply if you are being given constructive criticism. Please do not leave when you are being given constructive criticism.***

*Examples of harassment:*

- *Insulting, belittling, or cursing at a student*
- *Undermining a student's work by creating a hostile environment*
- *Humiliating or ridiculing the student individually or in front of others*
- *Bullying by exclusion – this may take the form of social isolation and/or exclusion from meetings*
- *The deliberate withholding of information with the intention of affecting a student's performance*
- *Unfair and destructive criticism*
- *Intimidating behavior*
- *Verbal abuse and spreading of unfounded rumors*
- *Setting of unrealistic targets which are unreasonable and/or changed with limited notice or consultation*

## CLINICAL GRADING

Each student is allowed **only one clinical rotation**. In clinical, a failure of any portion of the affective or technical grading, a failing cumulative score, an attendance failure, or dismissal from the clinical for other reasons will result in the student being dismissed from the program (without the opportunity for another clinical).

If he/she should fail or be dismissed from any of the clinical courses (MLT 226, 231 or 236), he/she will not get another chance. **So please do your best in all courses.**

MLT Clinical Grade for Practicum I and II will be calculated as follows:

20% Affective Evaluation (Clinical site evaluates)

40% Technical Evaluation (Clinical site evaluates)

20% Practicum Final Test

20% Medialab Exam Simulator Selected Areas exams should be completed before the proctored Comprehensive test is due.

MLT Clinical Grade for Practicum Correlation: (3 categories, each worth 1/3 of your grade)

**Case Study Grade:** (on My Portal)

2.5 points for case study, 2.5 for your discussion, 5 for your answers to others. 1/3 of your grade

**Weekly Reports** (on My Portal)

5 points for each week 1/3 of your grade

**Rotation Quizzes** (on My Portal)

1/3 of your grade

## SUMMARY OF INFORMATION NEEDED BY SCHOOL FOR PROGRAM COMPLETION

- ✱ A copy of your clinical schedule, a phone number, address, and email address for you while on clinical
- ✱ Weekly Report, Rotation Quiz and Case Studies completed by the due dates within the guidelines of the rubrics.
- ✱ **Fill out the proctor form for both of the final tests.**
- ✱ Take the Medialab ASCP BOC CAT exam required with your proctor on the day it is scheduled.
- ✱ Take the BOC Final Exam(found in MLT 226) on the day scheduled - **(please be sure to complete the questions and all information in the review book before attempting this test or your grade may suffer and you may not pass).**
  
- ✱ Complete the LATC yearly student survey, usually completed in February of each year.
- ✱ Complete the SIM Lab survey.
- ✱ Complete the evaluation of your clinical training lab survey. (found on My Portal)
- ✱ PLEASE remind your clinical instructors to complete your evaluations, both Practicum I and Practicum II when you have completed your practicum. This is available via survey monkey. Copies of the evaluations they will use are on the next page.
- ✱ Upload the **completed** attendance and practicum checklists in the final monthly report.

## REGISTERING FOR THE CERTIFICATION TEST:

You are encouraged to register for your certification examination during your clinical training period. The test available is called the BOC (Board of Certification) Test. This test **is not** a requirement of graduation but is highly encouraged as most labs will require their employees have this certification. Since you will not be eligible to take the test until you have completed the program, it is important that when you register you choose the **eligibility date of when you have completed the MLT course and your practicum is done**. Please do not use the date of the graduation ceremony. The BOC will contact us to sign off that you will be eligible to take the exam on the dates you have said you are eligible.

The BOC will need an official transcript before they will send you your test results. Many employers will hire you upon the conditions that you will take and pass the certification exam. Often they will give a pay increase when you provide the documentation of this. When you have completed the MLT program, **YOU** will need to request an official transcript be sent to the BOC. You can do this from the LATC main site.

In order to sign up for your BOC test you will go to their website, <http://www.ascp.org/boc>.

Click on the apply for BOC exam and follow the instructions. You will need to pay for the exam yourself. Make sure that you send us a copy of the receipt for this and we will process your refund.

The screenshot shows the ASCP website homepage. At the top left is the ASCP logo with the tagline "STRONGERTOGETHER". To the right is a search icon and two buttons: "STORE" and "LOGIN". Below the header is a navigation bar with links: "MY ROLE", "MEMBERSHIP", "LEARNING", "GET INVOLVED", "CAREERS", "ABOUT ASCP", "BOARD OF CERTIFICATION", and "NEWS". The main content area features a large banner for "Renew Your 2021 Membership!". The banner text reads: "ASCP is here to help you achieve your professional goals while solving critical problems and saving countless lives. **We're in this together.**" Below this text is a button that says "Renew or Join Today!". To the right of the banner is a graphic with the text "SOLVING PROBLEMS SAVING LIVES TOGETHER" and "2021 ASCP MEMBERSHIP". Below the banner are five circular icons with corresponding text labels: "Renew Membership" (icon of a person with a lightbulb), "Apply for BOC Exam" (icon of a checkmark in a circle), "Shop Online" (icon of an open book), "Verify Credentials" (icon of a document with a question mark), and "Manage Your CMP" (icon of a document with a checkmark).

ASCP STRONGERTOGETHER

Q STORE LOGIN

MY ROLE MEMBERSHIP LEARNING GET INVOLVED CAREERS ABOUT ASCP BOARD OF CERTIFICATION NEWS

**Renew Your 2021 Membership!**

ASCP is here to help you achieve your professional goals while solving critical problems and saving countless lives. **We're in this together.**

Renew or Join Today!

SOLVING PROBLEMS  
SAVING LIVES  
TOGETHER  
2021 ASCP MEMBERSHIP

Renew Membership Apply for BOC Exam Shop Online Verify Credentials Manage Your CMP

## Appendix A: Practicum 1 and 2 Final Evaluations Questions

Complete the evaluations at the following web address:

[https://my.lakeareatech.edu/ICS/Student/MLT\\_Practicum\\_Survey/](https://my.lakeareatech.edu/ICS/Student/MLT_Practicum_Survey/)

Clinical Supervisor/Instructor signature \_\_\_\_\_ Date \_\_\_\_\_

### Practicum I Evaluation

Email Address
First Name
Last Name
Custom Data 1
Please complete the Affective and Technical Evaluations.
LATC's Grading Scale is as follows:      A = 94-100%,      B=87-93%,      C=80-86%,      F= Below 80%.
-----
The student must obtain an average grade of 80% or better to pass Practicum 1.
Selecting a score of between 70-79% will decrease their average, student may or may not pass if this is selected.
A score of less than 70% is unsatisfactory in any criteria and will result in failure of the clinical practicum.
-----
Final Practicum Grade is calculated as follows: Affective Evaluation (20%), Technical Evaluation (40%), Media Lab Test (20%), BOC Test (20% )
Student Name
Clinical Site
Dates of Rotation
Clinical Evaluator
Supervisor Email
Date of Evaluation
<b>Affective Evaluation - 20% of the Practicum 1 Grade</b>

Time Management	The Student:
<b>A    100    94</b>	Demonstrates time management skills that exceed the expected level (comes early, demonstrates initiative in performing laboratory testing, stays until all work is completed.
<b>B    93    87</b>	Is punctual; begins work in a timely manner; completes deadlines within assigned time frame, completes the required hours.
<b>C    86    80</b>	Is occasionally late (no more than 3 times during practicum without a reasonable excuse); occasionally has problems beginning work in a timely manner; a few deadlines not completed within assigned time frame, occasionally asks for approval to leave early.
<b>D    79    70</b> If given, average will determine if student will pass	Is often late (no more than 10 times during practicum without a reasonable excuse); has difficulty "getting started" on work, occasionally leaves work without supervisor approval, fails to meet assigned deadlines.
<b>F    69    0%</b> If given, student will not pass.	Is consistently late, continually has trouble "getting started" on work, leaves early without approval of their supervisor, consistently fails to meet assignment deadlines.

<b>Workload Management</b>	The Student:
<b>A 100 94</b>	Shows more organizational skills than most entry-level bench technicians.
<b>B 93 87</b>	Can organize work and produce required quantity of work with accuracy within the allotted time frame.
<b>C 86 80</b>	Occasionally has trouble organizing work; usually produces required quantity of work with accuracy within the allotted time frame.
<b>D 79 70</b> If given, average will determine if student will pass	Frequently has trouble organizing work; struggles to complete the work in an acceptable time frame with occasional inaccurate results.
<b>F 69 0%</b> If given, student will not pass.	Consistently requires help with organization; cannot complete required quantity of work with accuracy within allotted time; must always ask questions in order to complete the task.

<b>Facilities Management</b>	The Student:
<b>A 100 94</b>	Demonstrates initiative by cleaning, restocking, and adhering to regulation without directive to do so at all times.
<b>B 93 87</b>	Leaves work area clean and restocked; properly uses and maintains equipment; adheres to all published safety regulations in the laboratory.
<b>C 86 80</b>	Occasionally leaves the work area dirty or unstocked, usually properly uses and maintains equipment and is not willfully negligent, adheres to all published safety regulations in the laboratory.
<b>D 79 70</b> If given, average will determine if student will pass	Often leaves the work area dirty and unstocked; occasionally forgets to perform equipment maintenance, occasionally violates published safety guidelines.
<b>F 69 0%</b> If given, student will not pass.	Does not leave work area clean and restocked even with reminding; willfully damages equipment; willfully violates published laboratory safety regulations.

<b>Professionalism 1</b>	The Student:
<b>A 100 94</b>	Is an exemplary professional at all times and in all circumstances.
<b>B 93 87</b>	Willingly follows instructions and accepts professional constructive criticism regarding work; interacts with faculty and students in a professional manner, e.g., is polite, considerate, pleasant and unhurried.
<b>C 86 80</b>	Occasionally fails to follow instructions and/or accepts professional constructive criticism with some resistance; occasionally interacts with faculty and other students in an unprofessional manner.
<b>D 79 70</b> If given, average will determine if student will pass	Often fails to follow instructions and/or accept professional constructive criticism, disagrees with faculty or other students.
<b>F 69 0%</b> If given, student will not pass.	Is willfully disobedient and insubordinate; acts unprofessionally, e.g., is abusive toward faculty members or other students.

<b>Professionalism 2</b>	The Student:
<b>A 100 94</b>	Handles work in logical sequence; is fully aware of own limitations; seeks help when needed.
<b>B 93 87</b>	Generally handles work in a logical sequence; is aware of own limitations; seeks help when needed.
<b>C 86 80</b>	Occasionally handles work in an illogical sequence; is aware of own limitations most of the time, occasionally seeks help before thinking the situation through. Asks many questions as a result of insecurity.
<b>D 79 70</b> If given, average will determine if student will pass	Often handles work in an illogical sequence; works beyond their limitations, has difficulty thinking a situation through so seeks help often. Asks many questions as a result of insecurity.
<b>F 69 0%</b> If given, student will not pass.	Has difficulty handling work in logical sequence, even after direction, does not recognize limitations even after limitations are pointed out; refuses to seek help or requires constant supervision/help.

Please comment on any scores less than 80% on the Affective Section:

**Technical Evaluation = 40% of Practicum 1 Grade**



<b>Technical Objectives</b>	<p>Please use the descriptions below to determine student grade.</p> <p>LATI's Grading Scale A = 94-100%, B=87-93% C=80-86%, F= Below 80%.</p>
<b>A 100 94</b>	Student easily performs the tests after adequate training and has shown that they would be capable of performing them without supervision.
<b>B 93 87</b>	Student has shown they would capable of performing tests with minimal supervision after adequate training in the procedure.
<b>C 86 80</b>	Student has shown they would be capable of performing the tests only with moderate supervision after adequate training in the procedure.
<b>D 79 70</b> If given, average will determine if student will pass	After adequate training, the student struggles with the procedure, requires retraining and requires moderate supervision each time the procedure is performed.
<b>F 69 0%</b> If given, student will not pass.	After adequate training, the student requires repeated retraining and is incapable of performing tests with direct supervision.
<b>NP=Demonstrated but Not Performed</b>	Procedure demonstrated and student understands the principle and purpose of the test. No grade will be entered.
<b>NA=Not Applicable</b>	Procedure either not available to demonstrate/perform or inadequate number of tests available for student performance making evaluation difficult (not demonstrated or minimal student performance).

#### General Lab Evaluation:

1. Demonstrates safety within the laboratory.
2. Follows test procedures and does not take short-cuts.
3. Demonstrates proper use and care of laboratory glassware, supplies and instruments
4. Well organized work area-keeps area neat and clean.
5. Recognizes normal and abnormal results.
6. Interprets test results correctly.
7. Recognizes "alert" or "critical" values and demonstrates an understanding of the importance of such values.
8. Notifies technologist/supervisor when abnormal and "critical" values are obtained on patient specimens.
9. Demonstrates the ability to use the computer for calculations and data entry.
10. Performs appropriate Quality Control for test procedures.
11. Records Quality Control results correctly.
12. Notifies supervisor when quality control results indicate a need for corrective action.
13. Performs laboratory calculations (such as dilutions, solution preparation, manual procedure calculations, etc.) correctly.
14. Demonstrates an understanding of the principles of each of the test methods performed during rotation.
15. Performs specimen evaluation and accessioning.
16. Provides notification and clarification on problem specimens.
17. Processes specimen send-outs to other labs.
18. Initiates timely response to STAT requests.
19. Complies with federal laws, regulations, and guidelines.
20. Resolves or refers operational problems.
21. Correctly prepares and labels reagents.
22. Monitors reagent stability/sterility and expiration.
23. Demonstrates proper use and care of the microscope.

24. Pipets accurately.
<b>Phlebotomy</b>
1. Properly identifies patient prior to phlebotomy procedure.
2. Recognizes and utilizes only acceptable venipuncture sites.
3. Properly selects the correct collection tubes for all tests ordered and draws them in the correct order.
4. Legibly and correctly Initials, records collection times, notes any IV's being given.
5. Perform specimen collection procedures (venous, capillary, cultures, newborns) properly.
6. Follows isolation procedures correctly and handles isolation specimens properly.
7. Transports and processes specimens properly.
<b>Chemistry</b>
1. Performs chemical laboratory procedures utilizing manual and/or automated techniques and obtains results within acceptable limits of accuracy for each analyte (electrolytes; carbohydrates; lipids; non-protein nitrogenous substances like BUN, creatinine, uric acid; enzymes; hormones; drugs; proteins)
2. Assesses specimen and result acceptability including pre-analytical, analytical and post-analytical variables.
3. Recognizes results outside of linearity and follows the protocol to obtain an accurate result.
4. Dilutes samples correctly when needed.
5. Prepares reagents of varying concentrations as required for the analysis.
6. Performs the preventative maintenance on the equipment.
7. Prepares the Controls and performs the QC on each instrument, recognizing out of control values and the need to determine and document the cause of these values.
8. Prepares calibrators for different automated/manual methods as needed.
9. Calibrates the instrument when required.
10. Performs calculations such as 24 hour urine protein and creatinine, creatinine clearance, anion gap, BUN/creatinine ratio, unconjugated bilirubin, globulin and others)
11. Performs pipette calibrations.
12. Performs blood gas analysis.
12a. Please indicate the type of blood gas analyzer the student operates:
<b>Urinalysis and Body Fluids</b>
1. Operates (including calibration, monitoring, and preventive maintenance) various urinalysis instrumentation properly.
1a. Please list the Urinalysis instruments the student can operate:
2. Recognizes pre-analytical, analytical and post-analytical variables and adapts to required testing to ensure accurate test results reporting.
3. Performs macroscopic exam of urine with accuracy.
4. Performs biochemical evaluation of urine with accuracy.
5. Reports microscopic examination of urine accurately.
6. Performs Specific Gravity with Refractometer correctly.
7. Completes routine urinalysis in a timely fashion and reports patient values according to lab protocol.
8. Performs QC for biochemical and/or microscopic exam of urine.
9. Performs confirmatory tests as required per lab protocol.
9a. Please list confirmatory tests performed:
10. Flexes to microscopic urinalysis when lab results indicate the need to do so.
11. Performs and interprets occult blood testing of feces.
12. Performs pregnancy tests on urine specimens with accurate results.
13. Processes and handles all body fluids correctly.



13a. List the type of body fluid analysis performed:
<b>Hematology</b>
1. Operates (including calibration, monitoring, and preventive maintenance) various hematology instrumentation properly.
1a. Hematology instruments the student can operate:
2. Prepares, labels, and stains acceptable peripheral blood smears.
3. Examines peripheral blood smears, performing platelet and WBC estimates, recognizing normal and abnormal RBC, WBC, and platelet morphology and maturation stages.
4. Performs hematology laboratory procedures utilizing manual and/or automated techniques and obtains results within acceptable limits of accuracy for each analyte (hemoglobin, hematocrit, Erythrocyte Sedimentation Rate, WBC counts, RBC counts, platelet counts, Red Blood Cell Indices, retic counts).
4a. List any of the tests in #4 not performed by the student:
5. Assesses the acceptability of specimens, recognizing preanalytical, analytical and post-analytical errors and follows acceptable protocol to obtain accurate results.
6. Correctly performs cell counts on other body fluids.
7. Demonstrates principles and techniques of a variety of different coagulation procedures utilizing manual and/or automated techniques (bleeding times or PFA, prothrombin time/ INR, partial thromboplastin time, fibrinogen, fibrin degradation products (fibrin split products) or D-dimer).
8. Performs Sed Rates accurately.
9. Performs manual reticulocyte counts accurately
10. Performs daily Quality Control prior to patient testing and recognizes results that are out of limit; follows correct protocol when this occurs.
<b>Immunology</b>
1. Performs immunology/serology laboratory procedures utilizing manual and/or automated techniques and obtains results within acceptable limits of accuracy.
2. Performs QC on the tests required, recognizes "out of limits" QC and does not report patient results until appropriate troubleshooting has been completed and documented correctly.
3. Recognizes pre-analytical, analytical and post-analytical variables and handles them appropriately to ensure accurate test results and reporting.
4. Correlates patient test results with the disease process it signifies, relates this result to all lab tests performed on the patient.
5. Please list the kit tests the student performed:
6. Please list the Instrumentation or types of Immunology tests the student performed: (examples such as Double Immunodiffusion, Radial Immunodiffusion, IEP, IFE, Chemiluminescent, Nephelometry, etc.)
Comments
1. Are there any tests or procedures that the student should perform or repeat prior to graduation?
2. Did the student accomplish the learning experiences YOU feel he/she should have accomplished during this rotation?
3. Is there anything you would like to compliment the student on?
4. Do you have any other comments or suggestions?

## Practicum II Evaluation:

Please complete the Affective and Technical Evaluations.

LATC's Grading Scale is as follows: A = 94-100%, B=87-93%, C=80-86%, F= Below 80%.

The student must obtain an average grade of 80% or better to pass Practicum 1.

Selecting a score of between 70-79% will decrease their average, student may or may not pass if this is selected.

A score of less than 70% is unsatisfactory in any criteria and will result in failure of the clinical practicum.

Final Practicum Grade is calculated as follows:

Affective Evaluation (20%), Technical Evaluation (40%), Media Lab Test (20%), BOC Test (20%)

Student Name

Clinical Site

Dates of Rotation

Clinical Evaluator

Supervisor Email

Date of Evaluation

### Affective Evaluation - 20% of the Practicum 1 Grade

Time Management	The Student:
<b>A 100 94</b>	Demonstrates time management skills that exceed the expected level (comes early, demonstrates initiative in performing laboratory testing, stays until all work is completed.
<b>B 93 87</b>	Is punctual; begins work in a timely manner; completes deadlines within assigned time frame, completes the required hours.
<b>C 86 80</b>	Is occasionally late (no more than 3 times during practicum without a reasonable excuse); occasionally has problems beginning work in a timely manner; a few deadlines not completed within assigned time frame, occasionally asks for approval to leave early.
<b>D 79 70</b> If given, average will determine if student will pass	Is often late (no more than 10 times during practicum without a reasonable excuse); has difficulty "getting started" on work, occasionally leaves work without supervisor approval, fails to meet assigned deadlines.
<b>F 69 0%</b> If given, student will not pass.	Is consistently late, continually has trouble "getting started" on work, leaves early without approval of their supervisor, consistently fails to meet assignment deadlines.

<b>Workload Management</b>	The Student:
<b>A 100 94</b>	Shows more organizational skills than most entry-level bench technicians.
<b>B 93 87</b>	Can organize work and produce required quantity of work with accuracy within the allotted time frame.
<b>C 86 80</b>	Occasionally has trouble organizing work; usually produces required quantity of work with accuracy within the allotted time frame.
<b>D 79 70</b> If given, average will determine if student will pass	Frequently has trouble organizing work; struggles to complete the work in an acceptable time frame with occasional inaccurate results.
<b>F 69 0%</b> If given, student will not pass.	Consistently requires help with organization; cannot complete required quantity of work with accuracy within allotted time; must always ask questions in order to complete the task.

<b>Facilities Management</b>	The Student:
<b>A 100 94</b>	Demonstrates initiative by cleaning, restocking, and adhering to regulation without directive to do so at all times.
<b>B 93 87</b>	Leaves work area clean and restocked; properly uses and maintains equipment; adheres to all published safety regulations in the laboratory.
<b>C 86 80</b>	Occasionally leaves the work area dirty or unstocked, usually properly uses and maintains equipment and is not willfully negligent, adheres to all published safety regulations in the laboratory.
<b>D 79 70</b> If given, average will determine if student will pass	Often leaves the work area dirty and unstocked; occasionally forgets to perform equipment maintenance, occasionally violates published safety guidelines.
<b>F 69 0%</b> If given, student will not pass.	Does not leave work area clean and restocked even with reminding; willfully damages equipment; willfully violates published laboratory safety regulations.

<b>Professionalism 1</b>	The Student:
<b>A 100 94</b>	Is an exemplary professional at all times and in all circumstances.
<b>B 93 87</b>	Willingly follows instructions and accepts professional constructive criticism regarding work; interacts with faculty and students in a professional manner, e.g., is polite, considerate, pleasant and unhurried.
<b>C 86 80</b>	Occasionally fails to follow instructions and/or accepts professional constructive criticism with some resistance; occasionally interacts with faculty and other students in an unprofessional manner.
<b>D 79 70</b> If given, average will determine if student will pass	Often fails to follow instructions and/or accept professional constructive criticism, disagrees with faculty or other students.
<b>F 69 0%</b> If given, student will not pass.	Is willfully disobedient and insubordinate; acts unprofessionally, e.g., is abusive toward faculty members or other students.

<b>Professionalism 2</b>	The Student:
<b>A 100 94</b>	Handles work in logical sequence; is fully aware of own limitations; seeks help when needed.
<b>B 93 87</b>	Generally handles work in a logical sequence; is aware of own limitations; seeks help when needed.
<b>C 86 80</b>	Occasionally handles work in an illogical sequence; is aware of own limitations most of the time, occasionally seeks help before thinking the situation through. Asks many questions as a result of insecurity.
<b>D 79 70</b> If given, average will determine if student will pass	Often handles work in an illogical sequence; works beyond their limitations, has difficulty thinking a situation through so seeks help often. Asks many questions as a result of insecurity.
<b>F 69 0%</b> If given, student will not pass.	Has difficulty handling work in logical sequence, even after direction; does not recognize limitations even after limitations are pointed out; refuses to seek help or requires constant supervision/help.



## Technical Evaluation-40% of Practicum 2 Grade

<b>Technical Objectives</b>	<b>Please use the descriptions below to determine student grade.</b> <b>LATI's Grading Scale A = 94-100%, B=87-93% C=80-86%, F= Below 80%.</b>
<b>A 100 94</b>	Student easily performs the tests after adequate training and has shown that they would be capable of performing them without supervision.
<b>B 93 87</b>	Student has shown they would capable of performing tests with minimal supervision after adequate training in the procedure.
<b>C 86 80</b>	Student has shown they would be capable of performing the tests only with moderate supervision after adequate training in the procedure.
<b>D 79 70</b> If given, average will determine if student will pass	After adequate training, the student struggles with the procedure, requires retraining and requires moderate supervision each time the procedure is performed.
<b>F 69 0%</b> If given, student will not pass.	After adequate training, the student requires repeated retraining and is incapable of performing tests with direct supervision.
<b>NP=Demonstrated but Not Performed</b>	Procedure demonstrated and student understands the principle and purpose of the test. No grade will be entered.
<b>NA=Not Applicable</b>	Procedure either not available to demonstrate/perform or inadequate number of tests available for student performance making evaluation difficult (not demonstrated or minimal student performance).

### General Lab Practice

1. Follows test procedures and does not take short-cuts.
2. Well organized work area-keeps area neat and clean.
3. Demonstrates safety within the laboratory.
4. Demonstrates an understanding of the principles of each of the test methods performed during rotation.
5. Provides notification and clarification on problem specimens.
6. Demonstrates proper use and care of the microscope.

### Microbiology

1. Determines acceptability of specimen.
2. Logs in specimen properly.
3. Selects and labels proper media for specimen.
4. Inoculates media with proper plate-streaking technique.
5. Selects proper incubation temperature and atmosphere.
6. Well organized work area – keeps area neat and clean.
7. Practices acceptable sterile technique throughout each step of the set-up.
8. Recognizes colony morphology of common bacteria.
9. Recognizes normal flora.
10. Recognizes contamination and reports appropriately.
11. Grades sputums properly.
12. Sets up and calculates the correct colony count on urine specimens.
13. Performs microbiology laboratory procedures utilizing manual and/or automated techniques and obtains results within acceptable limits of accuracy.
14. Performs QC, daily maintenance and troubleshooting with automated equipment when available.

14a. Automated Equipment Used:
15. Obtains organisms in pure culture.
16. Indicates which tests are needed to identify common pathogens.
17. Inoculates biochemicals properly.
18. Reads biochemicals and identifies common organisms.
19. Correctly identifies a series of unknown organisms.
20. Selects correct colony for identification and sensitivity testing.
21. Sets up and reads sensitivity test correctly.
22. Prepares smears (for gram staining, other) and stains properly.
23. Recognizes the morphology of various bacteria.
24. Performs and reports a Gram stain according to laboratory protocol.
25. Performs and reports KOH preps.
26. Performs any parasitology or mycology work done by the clinical site.
27. Identifies the patient and collects blood cultures properly.
28. Processes positive blood cultures following correct protocol.
29. Recognizes preanalytical, analytical and post-analytical variables and handles appropriately.
<b>Immunology</b>
1. Performs immunology/serology laboratory procedures utilizing manual and/or automated techniques and obtains results within acceptable limits of accuracy.
2. Performs QC on the tests required, recognizes "out of limits" QC and does not report patient results until appropriate troubleshooting has been completed and documented correctly.
3. Recognizes pre-analytical, analytical and post-analytical variables and handles them appropriately to ensure accurate test results and reporting.
4. Correlates patient test results with the disease process it signifies, relates this result to all lab tests performed on the patient.
5. Please list the kit tests the student performed:
6. Please list the Instrumentation or types of Immunology tests the student performed: (examples such as Double Immunodiffusion, Radial Immunodiffusion, IEP, IFE, Chemiluminescent, Nephelometry, Molecular, etc.)
<b>Immunochemistry</b>
1. Washes cells and prepares a 3-5% RBC suspension.
2. Grades agglutination reactions correctly.
3. Recognizes hemolysis as a positive result.
4. Performs and interprets ABO typing (forward and reverse) with 100% accuracy.
5. Performs and interprets Rh typing to include "weak D's".
6. Performs and interprets the direct antiglobulin test.
7. Performs and interprets antibody screens.
8. Performs antibody identification panels, and crosses off correctly to ID the correct antibody.
9. Performs gel tests; preparation of cell suspensions, adding the correct specimen to each well and interprets the results correctly.
10. Selects the appropriate type of blood for crossmatch.
11. Performs a number of crossmatches under the supervision of staff tech.
12. Performs fetal screen when indicated.
13. Performs fetal stain when indicated.
14. Documents all test results completely and accurately
15. Tags units of blood for transfusion.

16. Observes the issuance of blood including documentation
17. Explains and applies component usage.
18. Performs all quality control procedures in the blood bank, recognizing "out-of-limits" QC and taking appropriate action (not reporting patient results until appropriate troubleshooting has been completed and QC is within acceptable limits).
19. Recognizes preanalytical, analytical and postanalytical errors and follows up appropriately.
20. Explains emergency blood issue protocol
21. Explains proper reissue of blood back into the bank.
22. Please indicate any blood banking automated equipment used by the student during their blood bank rotation.
23. Please indicate the type of testing the student performed (tube or gel).
24. Please comment on any scores between 1 - 79% for the Immunohematology Section: (0 = NP or NA)
1. Are there any tests or procedures that the student should perform or repeat prior to graduation?
2. Did the student accomplish the learning experiences YOU feel he/she should have accomplished during this rotation?
3. Is there anything you would like to compliment the student on?
4. Do you have any other comments or suggestions?

## Appendix B: Example of a past student's case study:

A 67 year old female came to the ER complaining of stomach pains. She was severely dehydrated from three days of diarrhea. She had an elevated white count and she had slow, labored breathing. The initial labs on the patient showed an elevated white blood cell count with increased neutrophils and a low platelet count.

Patient Results (9am)		Reference Range
WBC	14.9	4.5-11.0 x 10 <sup>3</sup>
Segs	63	34-64%
Bands	31	0-6%
Lymphs	4	20-45%
Platelets	24	130-400 x 10 <sup>3</sup>

With her chemistry tests, all of her liver function tests were markedly elevated. Bun and creatinine were elevated as well. Blood cultures were drawn and the patient was admitted. She showed a decline in her health even more after admission. Within five to six hours after presenting to the ER the patient was transferred to CCU and put on a ventilator because of increased breathing problems. Labs were then drawn again and more of an increase in her liver tests followed. An increase in lactic acid at 4.8 (reference range is 0.7-2.1 mmol/L) and her blood gases were also abnormal with a low pH at 7.24 (reference range is 7.35 to 7.45).

Patient Results (9am) Liver Tests		Reference Range
AST	254	14-36 u/L
ALT	112	7-56 u/L
BUN	32	9-21 mg/dL
Creatinine	2.1	0.7-1.2 mg/dL

Total Bilirubin 4.5 0.2-1.3 mg/dL

**Patient Results (3pm) Liver Tests Reference Range**

BUN 38 9-21 mg/dL

Creatinine 2.6 0.7-1.2 mg/dL

Total Bilirubin 6.4 0.2-1.3 mg/dL

White blood count had started at 14.9 and decreased now to 2.8 and platelets were previously 24 and now showed a result of 12.

**Patient Results 9am 3pm Reference Range**

WBC 14.9 2.8 4.5-11.0 x 10<sup>3</sup>

Segs 63 48 34-64%

Bands 31 41 0-6%

Platelet 24 12 130-400 x 10<sup>3</sup>

On the differential on this white blood cell count the neutrophils looked like this: (A picture of a neutrophil with toxic granulation and vacuolization was attached.)

At about that time, the patient was transferred to xxxxxx and the next day in Micro the organism was close to being identified. The blood cultures Bacti-Alert system went off within six hours indicating possible organisms in the blood. The organism was then plated on media showing growth on the plates within 24 hours. The organism yielded a gram stain showing gram negative cocci.

The patient's coagulation tests were drawn at 3pm with the following results:

**Patient results (3pm) Reference Range**

Protime 27.4 9.0-12.0 sec

INR 2.7

APTT 81.1 24.0-32.0 sec

Fibrinogen 89 180-400 mg/dL

D-dimer >50,000 0-500 ng/mL

Additional serology tests showed fermentation of glucose, maltose, and sucrose. Oxidase positive and the organism grew well in a 10% carbon dioxide atmosphere. The final identification of the organism was done after reading the HNID panel.

**What kind of gram negative organism would grow on both blood and chocolate agar and what would you suspect the organism growing is?**

**Is there anything abnormal about the neutrophils shown? If so what is abnormal and why would you see this?**



## Appendix C: LATC's Post Exposure Plan



### Lake Area Technical College POST EXPOSURE REPORT FORM

Details of Exposure to be completed by Student/Staff

Name \_\_\_\_\_ Phone number \_\_\_\_\_ Date of report \_\_\_\_\_

Date of exposure \_\_\_\_\_ Time of exposure \_\_\_\_\_ Supervisor/Faculty \_\_\_\_\_

Program: ☐ DA ☐ MFR ☐ MA ☐ MLT ☐ Nursing ☐ OTA ☐ PTA ☐ HST ☐ Staff ☐ Other

Site (building) where exposure occurred \_\_\_\_\_ City/State \_\_\_\_\_

Was this a clinical site? \_\_\_\_\_ Name of clinical site \_\_\_\_\_

#### Details of Exposure

Details of the procedure being performed; include where and how the exposure occurred / types of sharps involved, etc

Extent of exposure (type and amount of blood/body fluid/material, severity of exposure including depth and whether fluid was injected, etc.) \_\_\_\_\_

Personal Protective Equipment worn: ☐ gloves ☐ gown ☐ mask ☐ protective eyewear ☐ face shield

other PPE (describe): \_\_\_\_\_

Decontamination utilized (i.e. hand washing, flushing mucous membrane eye, nose, mouth, etc.) \_\_\_\_\_

Description of first aid administered \_\_\_\_\_

#### **A potential HIV, HBV or HCV exposure, will include at least one item in each category (A and B)**

##### **A. Type of Body Fluid Exposure (check all that apply)**

☐ Blood ☐ Bloody respiratory secretions ☐ Bloody saliva/vomit ☐ Peritoneal/pleural/pericardial/synovial  
☐ Breast Milk ☐ Bloody urine/stool/tears/sweat ☐ Vaginal secretions ☐ Semen/CSF/Amniotic Fluid

##### **B. Portal of entry:**

Percutaneous (through the skin): ☐ needlestick ☐ puncture ☐ bite ☐ other \_\_\_\_\_

Mucous Membrane: ☐ eye ☐ nose ☐ mouth ☐ other \_\_\_\_\_

Cutaneous with non-intact skin: ☐ open/healing sore, wound or lesion (location) \_\_\_\_\_

☐ eczema, skin rash, non-intact skin (location) \_\_\_\_\_

☐ pierced ears other \_\_\_\_\_

**Have boxes been checked in both A and B above?** ☐ yes ☐ no

**If yes, a potential exposure has occurred. Source and/or baseline testing should be completed (next section)**

**If no, there is no risk of transmission and further evaluation is not required.**

I consent to the release of information such as immunization and immunity status to the LATC program, the clinical facility and the site providing my post-exposure counseling and management. I also consent to the release of the post-exposure serology test results to LATC and the clinical facility. I realize that I must follow the testing interval guidelines set forth in this document. If I fail to do so, I will be required to pay for my own medical bills related to this exposure.

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

\_\_\_\_\_  
Name of Exposed Person

\_\_\_\_\_  
Program Faculty / Supervisor Name

This post exposure plan will be followed by all student exposures occurring at LATC. If the source is unknown the student must see a physician as soon as possible (within 12 hours). If the source is known and lab tests return positive results, the student should see a physician as soon as the results are known. This form is to accompany the student and a signed copy returned to the program after they have been seen by the physician.

☐ Brown Clinic - Dr Aaron Shives    ☐ Sanford Clinic - Dr. William Devine    ☐ After clinic hours: Acute care or PLH

***Source Patient:***

Was the source patient identifiable? ☐ yes ☐ no    if no, it is not necessary to answer the remaining questions in this section. Please continue to the post-exposure Student Baseline section below.

Did the source complete the SOURCE CONSENT FORM? ☐ yes ☐ no

Did the source sign the medical release portion? ☐ yes ☐ no

***Perform the following tests immediately on the source:***

HIV 1/2 Antibody (rapid HIV Ab test preferred if available)

Date drawn \_\_\_\_\_ ☐ positive    ☐ negative    ☐ not tested

If rapid test is positive, consider it to be a true positive for PEP purposes, but send for confirmatory testing.

If rapid test is negative, consider it to be a true negative

Anti-HCV:    Date drawn \_\_\_\_\_ ☐ positive    ☐ negative    ☐ not tested

HBsAg:    Date drawn \_\_\_\_\_ ☐ positive    ☐ negative    ☐ not tested

**IF SOURCE IS NEGATIVE FOR THE TESTS ABOVE, NO FURTHER TESTING IS REQUIRED**

***Post Exposure Baseline:***

**Student's Hepatitis B immunity status:**

Date of last tetanus booster: \_\_\_\_\_

Series completed: ☐ yes    ☐ no    ☐ unknown

Post immunization titer (HBsAb): ☐ protected    ☐ negative    ☐ unknown

**IF EXPOSED PERSON IS KNOWN TO HAVE HBsAb PROTECTIVE TITER, THE HBsAg, HBcAb and HBsAb tests ARE NOT REQUIRED**

Date Baseline Testing Drawn \_\_\_\_\_ Facility \_\_\_\_\_

**Test Instructions:** ☐ save specimen until source testing results are known    ☐ test immediately (source unknown)

HIV 1/2 Ab :    ☐ yes    ☐ no

Anti-HCV:    ☐ yes    ☐ no

Hepatitis B core antibody    ☐ yes    ☐ no    ☐ **not tested –has known protective immunity (HBsAb)**

Hepatitis B surface antigen    ☐ yes    ☐ no    ☐ **not tested –has known protective immunity (HBsAb)**

HBsAb    ☐ yes    ☐ no    ☐ **not tested –has known protective immunity (HBsAb)**

Other tests ordered/performed \_\_\_\_\_ Date Results received \_\_\_\_\_

***Source Unknown or is infected with one of the viruses. This page to be completed by Consulting Physician***

***Post-exposure Management After Baseline Testing:***

**Hepatitis B:**

- Recommendations: ☐ No further follow up required ☐ Administer HBIG (date; dose) \_\_\_\_\_  
☐ Exposed person with unprotected titer: repeat first HB vaccine and retest HBsAb (titer) in 4-6 weeks  
☐ Additional recommendations \_\_\_\_\_

**Hepatitis C:**

- Recommendations: ☐ No further follow up required  
☐ Test HCV RNA PCR for viral load at 6 weeks ☐ Test anti-HCV at 6 months  
☐ Additional recommendations \_\_\_\_\_

**HIV:**

- Recommendations: ☐ No further follow up  
☐ Source is positive: see PEP recommendations below.  
☐ Source is positive: HIV Ab test at 6 weeks and 4<sup>th</sup> generation Ag/Ab test at 3-4 months (if available)  
☐ Source is positive: HIV Ab test at 3 and 6 months (4<sup>th</sup> generation test not available)

Further recommendations for post-exposure management and follow-up \_\_\_\_\_

\_\_\_\_\_

Counseling included topics of: \_\_\_\_\_

\_\_\_\_\_

Post-exposure consultation by: \_\_\_\_\_ Date: \_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Please Print Name)

Facility name and city: \_\_\_\_\_ Phone: \_\_\_\_\_



**Lake Area Technical College**  
**SOURCE INFORMATION AND CONSENT FORM AFTER BLOODBORNE EXPOSURE**

Exposed Person \_\_\_\_\_ Phone number \_\_\_\_\_ Date of report \_\_\_\_\_

Date of exposure \_\_\_\_\_ Time of exposure \_\_\_\_\_ Supervisor/Faculty \_\_\_\_\_

***Source Information***

Name of Source \_\_\_\_\_ Date Source Notified \_\_\_\_\_

Perform the tests listed below immediately.

Date Source Specimen Drawn \_\_\_\_\_

**Source Results:**

HIV 1/2:	<input type="checkbox"/> positive	<input type="checkbox"/> negative	<input type="checkbox"/> not tested
Anti-HCV:	<input type="checkbox"/> positive	<input type="checkbox"/> negative	<input type="checkbox"/> not tested
HBsAg:	<input type="checkbox"/> positive	<input type="checkbox"/> negative	<input type="checkbox"/> not tested

Date Source Results Reported \_\_\_\_\_

**Source Consent**

I have been notified that a blood borne exposure occurred with my blood. As the source of this exposure, I consent to have my blood drawn for the following tests: HIV 1/2 , Anti-HCV and HBsAg. I realize the importance for the results of these tests to be shared with the clinician as well as the faculty of LATC in order to determine further testing requirements of the exposed person. Therefore, I consent to release the information for these lab tests to \_\_\_\_\_ a member of the Faculty of the \_\_\_\_\_ program at Lake Area Technical College.

If the exposure occurred at LATC, I am aware that LATC will pay for the lab tests performed.

_____ Source Name	_____ Source Signature	_____ Date
----------------------	---------------------------	---------------

_____ LATC Faculty Name	_____ LATC Faculty Signature	_____ Date
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## Appendix D: Attendance Log and Action Plan

### LAKE AREA TECHNICAL COLLEGE

MLT 226/231/236

#### Daily Attendance and Progression Toward Competency Evaluation

*IT IS THE STUDENT'S RESPONSIBILITY TO HAVE THIS FILLED OUT EACH DAY.*

1. The clinical instructor (designee) MUST initial to verify student arrival time. If times need to be changed after this is done, the student will make the changes in the corrections column and ask you to verify the change with your initials.
2. The clinical instructor (designee) MUST initial to verify student departure time. Changes to be handled as #1 above.
3. The clinical instructor (designee) will review the student's competency checklist daily with the student and document any problem areas which need to be improved on and, if necessary, provide an action plan (on page 3).
  - a. If the student is not progressing to meet a competency, immediate notification of the LATC faculty is required (either via phone or email), so that the student may be counseled and offered an opportunity to remediate.
  - b. If the student is failing to achieve a competency after 2 or more attempts at the same skill, the LATC faculty, clinical instructor, and the student will develop an Action Plan (see attached Action Plan Form).
4. The student is entitled to a 15 minute break every 4 hours which will not be counted against the student's hours.
5. The student will take a ½ hour lunch when the student's schedule includes the 1100 AM to 1200 time frame. This 30 minutes will NOT be counted as student clinical hours.

Student Name _____					Month Reported on _____				
<b>Date</b>	Arrival Time	Instructor Initials	Departure Time	Instructor Initials	Corrections must be verified by instructor initials.	Daily Hours	Progression A= Acceptable F = Failure	Student Initials	Instructor Initials
Week # _____ Department _____ <b>Weekly Hours=</b> _____									
1.									
2.									
3.									
4.									
5.									
Week # _____ Department _____ <b>Weekly Hours=</b> _____									
1.									
2.									
3.									
4.									
5.									
Week # _____ Department _____ <b>Weekly Hours=</b> _____									
1.									
2.									
3.									
4.									
5.									
Week # _____ Department _____ <b>Weekly Hours=</b> _____									
1.									
2.									
3.									
4.									
5.									

## LAKE AREA TECHNICAL COLLEGE

### MLT 226/231/236 ACTION PLAN FORM

**Clinical Supervisor/Instructor:**

1. Document specific skill student is deficient in chart below.
2. Explain error to student and discuss and/or demonstrate correct method.
3. Please call Kelsi Houge 605-882-5284 x 285 or Kelly Pesek 605-882-5284 x 338 for assistance.

**Student:**

1. Review written procedure.
2. Explain procedure to instructor.
3. Perform procedure under direct supervision.
4. After repeating the procedure, the instructor will check the appropriate column, "A" for acceptable or "U" for unacceptable.
5. If "U" is checked contact LATC faculty (Kelsi or Kelly) immediately so a meeting can be scheduled.
6. Upon completion of the Action Plan, both the student and the Clinical Supervisor/Instructor will initial and date the form.

Student Name:			
Clinical Supervisor/Instructor's Name:			
Date	Identified Competency	Acceptable (A)	Unacceptable (U)

Action Plan successful (circle one): YES NO

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

Clinical Supervisor/Instructor signature\_\_\_\_\_ Date\_\_\_\_\_



## Appendix E: Clinical Practicum Competency List (Updated 1/4/2022)

### MLT STUDENT CLINICAL PRACTICUM Competency List

The clinical practicum is the capstone experience for the MLT students. It is the component of education where the student combines didactic/book learning with the important technical skills required in order to become a quality graduate and employee. The goal of the clinical practicum is to assist the MLT student in gaining the needed skills and competencies that are expected of an entry-level MLT employee.

Student experiences in the clinical affiliate are directed by the clinical affiliate and the workflow. When the competency is met, the student should continue to run these tests as learning will continue to occur. If a student performs a test, but receives an unsatisfactory rating, the performance should not be counted toward the total.

---

#### Clinical Practicum Goals:

Upon completion of each section during clinical practicum, the MLT student will be able to:

1. Accurately perform procedures in each department at his/her Clinical Facility with the competence of an entry-level technician.
2. Assess specimen acceptability and results acceptability.
3. Take the ASCP BOC MLT certification test and pass the General Laboratory Skills/Phlebotomy components.

#### Directions:

Bring this list to the clinical site with you each day. Read through the information found in the section you will be working in. **Use the number performed section of your competency list as a rough estimate.** Please be aware that there is an objective in the General Lab/Phlebotomy section (i) relating to pre-analytical, analytical and post-analytical variables that you will fill out any time any of these are encountered. These results will require action on you or the tech's part, a test may need to be re-run, a patient redrawn, a dilution made, results reported incorrectly need to be reported to the physician, critical values called, etc. When completing this section, you will be asked to determine what type of error occurred, explain the circumstances, what was done to get the correct results and to rectify the situation. This should be discussed with the tech you are working with and they should verify that this was done by initialing in the appropriate section.

At the end of each month (and at the end of clinical), you will be asked to scan and upload a copy of this document to an email sent to **Kelsi and Kelly**. All required supervisor initials should be obtained before the form is scanned/uploaded. All hours should be totaled at the end of the week.

#### **General Lab Practice/Phlebotomy**

Given the necessary supplies and equipment, the student will perform all General Laboratory Skills/Phlebotomy procedures done at the Clinical Facility accurately, timely, and according to laboratory protocol.

## Clinical Competency Checklist

Student Name \_\_\_\_\_



MEDICAL LABORATORY TECHNICIAN PROGRAM

Immunohematology- Sim Lab		
Procedure	Number Performed	Competency completed (initial and date)
The MLT student will complete ABO and Rh typing on each sample provided obtaining results with 100% accuracy. (minimum 15)		
The MLT student will perform Antibody Screen and Crossmatch on the samples provided according to the lab's protocol and obtaining results with 100% accuracy. (minimum 5 Ab Screen and 10 Crossmatch)		
The MLT student will perform antibody identification and antigen phenotype or enzyme testing (if required) on each sample provided according to the lab's protocol and will obtain the correct identification with 100% accuracy. (minimum 5 Ab ID; 4 on paper)		
The MLT student will complete Rhlg testing on each sample provided according to the lab's protocol and obtain results with 100% accuracy. (to include fetal screen and fetal stain if required with the determination of the correct number of vials to be administered) (minimum 1 fetal screen/1 fetal stain)		
The MLT student will complete DAT testing on each sample provided according to the lab's protocol and obtaining results with 100% accuracy. (minimum 5)		
The MLT student will perform an antibody titer on the sample provided according to the lab's protocol and obtaining results with 100% accuracy. (minimum 1)		
The MLT student will perform an elution on the sample provided according to the lab's protocol and obtaining results with 100% accuracy. (minimum 1)		
Given quality control materials, the MLT student will perform daily quality control procedures according to the lab's protocol obtaining results with 100% accuracy. (minimum 1)		
The MLT student will perform serofuge maintenance to include timer, button quality and RPM according to the lab's protocol and obtaining results with 100% accuracy. (minimum 1)		

**Microbiology- Sim Lab**

Procedure	Number Performed	Competency completed (initial and date)
The MLT student will assess specimen acceptability and correctly process and plate on the appropriate media according to the lab's protocol with 100% accuracy. Indicate for each type of specimen.		
The MLT student will prepare Gram stains and interpret results to include gram reaction, morphological characteristics, arrangement, and leukocyte numbers if applicable, with 100% accuracy. (minimum 20)		
The MLT student will perform antibiotic susceptibility testing (automated, Kirby-Bauer/MIC, D test, beta-lactamase, etc.), with 100% accuracy. (minimum 5)		
The MLT student will process and set-up specimens in an automated blood culture machine, and follow-up on positive and negative results as indicated by instrument, according to the lab's protocol with 100% accuracy.		
The MLT student will process and perform testing according to the lab's protocol with 100% accuracy.		
Given quality control material, the MLT student will perform the daily quality control and daily maintenance on the automated instrument, with acceptable results.		
The MLT student will differentiate between normal flora and potential pathogens, perform biochemical tests and other identification means to interpret results and correctly identify microorganisms. Indicate for each culture type with 100% accuracy.		
Culture Work-ups	Number completed	Competency completed (initial and date)
Sputum (minimum 3)		
Blood (minimum 4)		
Urine (minimum 5)		
Wound (minimum 2-3)		
CSF (minimum 1)		
Stool (minimum 3)		
Throat (minimum 3)		
Genital (minimum 3)		
Fungus (minimum 3)		

Rotating Departments- Sim Lab

Procedure	Number Performed	Competency completed (initial and date)
The MLT student will successfully perform blood draws according to the lab's protocol. (minimum 2)		
The MLT student will make blood smears to be determined acceptable by the MLT program instructors according to the lab's protocol. (minimum 10)		
The MLT student will complete case studies from all areas of the lab provided by the MLT program instructors. (minimum 21)		
The MLT student will perform dilutions using samples provided with 100% accuracy. (minimum 5)		
The MLT student will perform two titers using samples provided with 100% accuracy. (minimum 2)		
The MLT student will perform pipette calibration using the Artel System according to the lab's protocol within established limits. (minimum 2)		
The MLT student will perform WBC and platelet estimates on the slides provided according to the lab's protocol within established limits. (minimum 3)		
The MLT student will perform corrected WBC counts for nRBCs according to the lab's protocol within established limits. (minimum 2)		
The MLT student will perform WBC differentials using Medialab website with 95% accuracy. (minimum 5)		
The MLT student will perform UA cases using Medialab website with within established limits. (minimum 5)		
The MLT student will perform WBC differentials using slides provided according to the lab's protocol within established limits. (minimum 10)		
The MLT student will perform UA microscopic exams using samples provided according to the lab's protocol within established limits. (minimum 10)		
The MLT student will perform UA quality control according to the lab's protocol within established limits. (minimum 1)		
The MLT student will perform urine dipstick testing according to the lab's protocol within established limits. (minimum 5)		
The MLT student will successfully collect a set up blood cultures according to the lab's protocol with 100% accuracy. (minimum 1)		
The MLT student will perform quality control on the Mindray BS200 according to the lab's protocol within established limits (minimum 1)		
The MLT student will determine appropriate sample requirements for various chemistry tests with 100% accuracy.		
The MLT student will determine correct methodologies for various chemistry tests with 100% accuracy. (minimum 5)		
The MLT student will perform body fluid counts according to the lab's protocol within established limits. (minimum 2)		

General Lab Practice/ Phlebotomy		
Procedure	Not performed at this site	Competency completed (initial and date)
The MLT student has proficiently obtained patient samples for each of the tests ordered, using either a syringe or multi-sample technique, following standard protocol 100% of the time		
The MLT student has proficiently obtained patient samples for each of the tests ordered, utilizing dermal puncture, following standard protocol 100% of the time		
The student obtained blood cultures (with physician's orders), with 100% accuracy.		
The MLT student will observe the collection of blood gases.		
Given patient's blood or fluid samples for a variety of tests, to include processing and distribution to laboratory departments, the MLT student will process (including centrifugation) the samples with 100% accuracy.		
the MLT student will enter the correct information into the Laboratory Information System, with 100% accuracy.		
Given samples requiring lab calculations (such as dilutions), student performs calculations with verification and discussion/explanation with supervisory tech.		
Given patient samples requiring lab calculations (such as dilutions), student performs calculations with verification and discussion/explanation with supervisory tech.		
Student will Pipette with accuracy, Follow Safety Guidelines, Properly Utilize Glassware, Supplies and Equipment, Label Samples and Reagents Correctly and Comply with Federal Laws, Regulations and Guidelines (evaluation at end of practicum).		
Pipettes with accuracy		
Follows Safety guidelines		
Properly utilizes Glassware, Supplies and Equipment		
Labels Samples and Reagents correctly		
Complies with Federal Laws, Regulations and Guidelines		

**General Lab Practice/ Phlebotomy**

The MLT student will assess the acceptability of all specimens to detect pre-analytical variables (including identification) verify acceptability of results to detect analytical variables and ensure proper reporting of results (post-analytical. A minimum of 5 occurring actionable items should be discussed with the tech in charge, explained below and verified with tech initials. Please complete the information below for a minimum of 5 observed instances.

Minimum 5	Date of occurrence	Department of the Lab	Type of Variable: (circle)	Explain the circumstances and the steps taken to resolve the issue	Verification by supervising tech
1			Pre-analytical Analytical Post-analytical		
2			Pre-analytical Analytical Post-analytical		
3			Pre-analytical Analytical Post-analytical		
4			Pre-analytical Analytical Post-analytical		
5			Pre-analytical Analytical Post-analytical		



### Urinalysis and Body Fluids

Procedure	Not performed at this site	Competency completed (initial and date)
The MLT student will perform routine urinalysis (physical and chemical) on each obtaining results with 100% accuracy		
the MLT student will perform routine urinalysis (microscopic exam) on each obtaining results with 100% accuracy.		
The MLT student will perform microalbumin tests obtaining results with 100% accuracy.		
Given urine or body fluid samples, the MLT student will perform specific gravity determination by refractometer and obtain results with 100% accuracy.		
The MLT student will observe the processing of the sample for send out and refer to the protocol in the reference manual to include centrifugation and addition of preservative or storage at the appropriate temperature.		
Given body fluid samples (seminal, serous, synovial, CSF) the student will perform the tests required obtaining results with 100% accuracy List type of fluid and tests performed. Fluid type _____		
Given quality control material, the MLT student will perform the daily quality control and daily maintenance on the automated instrument, with acceptable results, as determined by the supervising technician/technologist.		

Hematology		
Procedure	Not performed at this site	Competency completed (initial and date)
The MLT student will perform automated CBC's on each obtaining results with 100% accuracy.		
The MLT will perform differential counts, leukocyte estimates, platelet estimates and describe erythrocyte morphology, obtaining results with 100% accuracy on normal samples.		
The MLT will perform differential counts, leukocyte estimates, platelet estimates and describe erythrocyte morphology, obtaining results with 100% accuracy on abnormal samples.		
The MLT student will perform erythrocyte sedimentation rates on each, obtaining results with 100% accuracy.		
Given quality control material, the MLT student will perform the daily quality control and daily maintenance on the automated instrument with acceptable results, as determined by the supervising technician/technologist.		
Coagulation		
Procedure	Not performed at this site	Competency completed (initial and date)
The MLT student will perform PT tests obtaining results with 100% accuracy.		
The MLT student will perform APTT tests obtaining results with 100% accuracy.		
Given quality control material, the MLT student will perform the daily quality control and daily maintenance on the automated instrument with acceptable results, as determined by the supervising technician/technologist.		
The MLT student will perform d-dimer tests obtaining results within 100% accuracy of predetermined/technologist's results.		

Chemistry
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The MLT student will perform automated analyses to include spectrophotometric (endpoint and kinetic) and electrochemical methods (ISE, etc.) and explain the principle and purpose of each test to include the possible diagnoses from various test results. List each test performed under the appropriate methodology and the number of patient samples run for each. Supervising tech will initial to verify the student explained the principle and purpose of tests run.

[illegible]

Chemistry		
Procedure	Not performed at this site	Competency completed (initial and date)
The MLT students will prepare reagents and calibration materials for different automated/manual methods with 100% accuracy.		
The MLT students will observe blood gas analysis on arterial/capillary blood samples.		
Given 5 blood samples, the MLT student will perform Drug Analysis (TDM or Toxicology) tests obtaining results within 100% accuracy of predetermined/technologist's results.		
Given quality control materials, the MLT student will perform the daily quality control, daily maintenance and calibration on automated instrumentation with acceptable results, as predetermined by the clinical supervisor. List the instrument(s) this has been completed on.		
The MLT student will perform BNP tests obtaining results with 100% accuracy.		
The MLT student will perform HA1c tests obtaining results with 100% accuracy.		

Immunology/Molecular/Miscellaneous		
The MLT student will perform Immunology kit tests available at the clinical facility obtaining results with 100% accuracy. List each type of test performed.		
Procedure	Number Completed	Competency completed (initial and date)
The MLT student will perform automated immunology tests available obtaining results within 100% accuracy of predetermined/technologist's results (examples are CRP, Mono, HCG)		
Test/Methodology	Number completed	Competency completed (initial and date)
The student will perform various molecular tests obtaining results with 100% accuracy.		
Test/ methodology	Number completed	Competency completed (initial and date)

Immunology/Molecular/Miscellaneous		
Given samples for other rapid test kits, the MLT student will perform the tests and obtain results with 100% accuracy. (i.e. Shiga toxin, fibrinogen, etc). List each type of test performed.		
Procedure	Number completed	Competency completed (initial and date)
The student will perform fecal occult blood testing on each obtaining results within 100% accuracy of predetermined/technologist's results.		
Given wet prep samples, the MLT student will analyze each sample and obtain results with 100% accuracy.		
Given quality control material, the MLT student will perform the daily quality control of the kit tests and daily maintenance on the automated instrument (if available) with acceptable results, as determined by the supervising technician/technologist.		

### Microbiology- Clinical

Given the necessary supplies and equipment, the student will perform all Microbiology procedures done at the Clinical Facility accurately, timely, and according to laboratory protocol.

Procedure	Number completed	Competency completed (initial and date)
Respiratory		
Throat		
Wound		
Genital		
Urine		
Stool		
Body Fluid		
Anaerobic		
Given microbiology specimens, the MLT students will prepare Gram stains and interpret results to include gram reaction, morphological characteristics, arrangement, and leukocyte numbers if applicable, within 100% accuracy of predetermined/technologist's results.		
Procedure	Number completed	Competency completed (initial and date)
Gram Stains		



Given microbiology specimens, the MLT students will differentiate between normal flora and potential pathogens, perform biochemical tests and other identification means to interpret results and correctly identify microorganisms. Indicate for each microbe correctly identified within 100% accuracy of predetermined/technologist's results.

Procedure	Number Completed	Competency completed (initial and date)

### Immunohematology- Clinical

Given the necessary supplies and equipment, the student will perform all Immunohematology procedures done at the Clinical Facility accurately, timely, and according to laboratory protocol.		
Procedure	Number completed	Competency completed (initial and date)
Given specimens of different blood groups, the MLT student will complete ABO and Rh typing on each obtaining results within 100% accuracy of predetermined/technologist's results.		
Given specimens, the MLT student will perform Antibody Screen and Crossmatch on each according to the lab's protocol and obtaining results within 100% accuracy of predetermined/technologist's results.		
Given positive antibody screens, the MLT student will perform antibody identification and antigen phenotype or enzyme testing (if required) on each according to the lab's protocol and will obtain the correct identification within 100% accuracy of predetermined/technologist's results.		
Given specimens, the MLT student will complete Rhlg testing on each according to the lab's protocol and obtain results within 100% accuracy of predetermined/technologist's results (to include fetal screen and fetal stain if required with the determination of the correct number of vials to be administered)		
Given specimens, the MLT student will complete DAT testing on each according to the lab's protocol and obtaining results within 100% accuracy of predetermined/technologist's results.		
The student will observe the thawing of fresh frozen plasma (1) and pooling of platelets (1).		
Given patients requiring blood components, the MLT student will issue or observe the issue of blood components (PRBC, platelets, fresh frozen plasma).		
Given quality control material, the MLT student will perform the daily quality control and daily maintenance on the automated instrument on 5 days, with acceptable results, as determined by the supervising technician/technologist.		

## Appendix F: Weekly Report Forum Example

Week 18 Original post: Wed 1/3/2018 at 8:27 PM

**Reply by Monday, May 7 at 23:55**

**Reply to other's replies by Thursday, May 10 at 23:55**

**Answer any student or instructor questions by Monday, May 14 at 23:55**

### MLT Student Weekly Report

Week #

Department(s):

Morale (how you are feeling):

Accomplishments for the week:

Goal for next week:

Daily Attendance (hours worked each day):

(i.e. 7 am – 3:30 pm, ½ hour lunch)

Monday

Tuesday

Wednesday

Thursday

Friday

**Total number of hours:**

Number of days absent this week:

Number of days tardy this week:

**State One interesting things that happened this week and then discuss it (50 words minimum):**

**What is something new you learned this week. Please state what you learned and then discuss more about it (how it works, what it means, etc.). (50 words minimum - should not be a repeat of the answer used above):**

I have carefully read the Clinical Student Guide (May 2023 version) and am aware of all of the content contained therein, including:

1. Behavioral Objectives and expectations for program completion
2. Duties of Clinical Practicum Liaison
3. Clinical Orientation and Expectations
4. Proposed schedule for rotation
5. Attendance requirements to include days/hours.
6. When is it OK to work weekends/nights/call.
7. Absence or sick days.
8. Holidays
9. Recording clinical hours on the monthly attendance log.
10. Assignments while on clinical
11. What to do when there is a blood/body fluid exposure
12. Service Work
13. Registration for certification
14. Clinical Grading
15. Summary of Information needed from the student for completion of the program
15. Samples of the Practicum Evaluations

By signing below, I agree to abide by all the requirements contained in this document.

Please print your name \_\_\_\_\_

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

\_\_\_\_\_  
Date