



**Medical Laboratory Technician Program
Bunker Hill Community College**

Student Handbook

September 2023

Bunker Hill Community College 250 New Rutherford Avenue Charlestown, Massachusetts 02129-2925

Dear Medical Laboratory Technician Student:

Welcome to the Medical Laboratory Technician (MLT) Department at Bunker Hill Community College! It is a pleasure to count you as one of our talented and committed students completing your journey to become part of the proud community of Laboratory Professionals.

As you begin what will be a very challenging year, it may seem to you that you are overwhelmed and overworked. Take heart, and keep the focus on your goal. It will be over before you know it, and you will be qualified to enter the laboratory community as a new professional. You have proven by your performance last year that you are committed and possess the tools to become a success in your chosen profession. Please remember that the faculty is there to help you at every step as you continue your journey.

This handbook is designed to guide you through your academic experience and is a companion to the Practicum Handbook that you will receive prior to going into your clinical experience.

We wish you much success as you continue your educational experience.

Sincerely,

Perla Gilman, MS, MLS (ASCP)

Professor

Clinical Coordinator

Department Chair of the Medical Laboratory Technician Department

Medical Laboratory Technician Program Director

MEDICAL LABORATORY TECHNICIAN PROGRAM

1. INTRODUCTION

STUDENT HANDBOOK OVERVIEW

The Medical Laboratory Technician (MLT) Student Handbook is intended to provide students with basic information and policies used in the classroom, laboratories and the clinical placements. Please read the MLT Student Handbook carefully and ask your instructor for clarification of any policies or procedures that are unclear. The Medical Laboratory Technician Program reserves the right to alter, add, or delete any statement or policy without prior notice. Students will receive revisions as they occur. Students will be required to sign an acknowledgment form and return it to the Clinical Coordinator.

The Bunker Hill Community College (BHCC) Catalog, website, and Student Handbook contain additional information on all services available at BHCC and should be used by students to obtain full knowledge of all policies and procedures.

ACCREDITATION

Bunker Hill Community College is accredited by the New England Association of Schools and Colleges, Inc. through its Commission on institutions of Higher Education. Inquiries regarding accreditation status should be directed to the administrative staff of the institution. Individuals may also contact : Commission on institutions of Higher Education, New England Association of Schools and Colleges, 209 Burlington Rd. Bedford, MA 01730-1433 (telephone 781-271-0022, email:cihe@neasc.org, URL: [http:// www.neasc.org](http://www.neasc.org)).

The Medical Laboratory Technician Program is accredited by the National Accrediting Agency for Clinical Laboratory Science (NAACLS), 5600 North River Rd. Suite 720, Rosemont, IL 60018 (telephone 773-714-8880), URL: <http://www.naacls.org/>).

BUNKER HILL COMMUNITY COLLEGE MISSION STATEMENT

Bunker Hill Community College is a public institution of higher education offering programs and courses of study including Arts and Sciences, nursing and allied health, domestic and international business, hospitality and culinary arts, early childhood education and human services, criminal justice and computer applications.

The College supports open access to post-secondary education by providing a range of educational opportunities that include distance learning, self-directed learning, and an Honors Program. The College offers an entry-level assessment program for new incoming students, a sound foundation in developmental studies, and for nonnative English speaking students, a variety of levels of English as a Second Language (ESL) instruction.

The student body reflects the diversity of the urban community and encouraging this diversity is an essential part of the College mission. The College seeks to become a national model

for successfully incorporating the strengths of many cultures, ethnic backgrounds, age groups, and learning styles into the curricular and extracurricular life of the institution. Bunker Hill Community College seeks to enhance its position as a primary educational and economic asset for the Commonwealth through cooperative planning and program implementation involving neighboring institutions of higher education, the public schools, community organizations, and area businesses and industries.

MLT PROGRAM MISSION STATEMENT

The mission of the Medical Laboratory Technician Program at Bunker Hill Community College is to provide students with a strong academic foundation so that they may take their place among the professionals in the medical laboratory community. Through rigorous coursework, and clinical laboratory experience, students will be provided with the education and training they need to achieve the basic skills to enter the workforce directly or, if they choose, gain entry to other institutions of higher learning to augment their skills. In keeping with the Mission of Bunker Hill Community College, the program seeks a student population that reflects the diversity of the urban community and encourages the incorporation of the strengths of many cultures, age groups, and learning styles into the curriculum.

PROGRAM GOALS

The primary goal of the Medical Laboratory Technician Program is to provide a quality education to the student, affording a level of proficiency and competence required for practitioners in the modern clinical laboratory. To that end, the specific goals of the program include the following:

- Provide students with a high quality academic and clinical education in the field of Clinical Laboratory Science.
- Insure that students are competent at the career entry level and have the knowledge and background to successfully prepare them for employment and successful certification.
- Cultivate communication skills that provide for effective and professional interactions with patients, peers, and other healthcare providers.
- Create an understanding of the student's function as part of a team and their role in the healthcare system.
- Instruct students in the procedures, analyses and interpretation of laboratory tests so that they are able to perform laboratory tests competently, problem solve and think critically.
- Generate in students an understanding of the importance of continuing education and professional awareness.
- Instill the importance of honesty, integrity, ethical behavior and professionalism in the workplace.

ESSENTIAL FUNCTIONS OF A MEDICAL LABORATORY TECHNICIAN

Observation (Vision)

The MLT student must be able to:

- Observe laboratory demonstrations of specimens, techniques, and instruments.
- Characterize the color, consistency, and clarity of biological specimens or reagents.
- Use a microscope to identify differences in structure and color (hue, shading and intensity) in microscopic specimens.
- Read and comprehend text, numbers, and graphs displayed in print and on a video monitor.

Movement

The MLT student must be able to, with or without reasonable accommodating::

- Move freely and safely about a laboratory.
- Perform moderately taxing continuous physical work, often requiring prolonged sitting or standing, over several hours.
- Travel to clinical laboratory sites for practical experience.
- Reach laboratory bench tops and shelves, patients lying in a hospital bed or patients seated in specimen collection furniture.
- Maneuver phlebotomy and culture collection equipment to collect laboratory specimens from patients.
- Control laboratory equipment (pipettes, inoculating loops, test tubes) and adjust instruments to perform laboratory procedures.
- Use an electronic keyboard to operate laboratory instruments and calculate, record, evaluate, and transmit data.

Communication

The MLT student must be able to:

- Read and comprehend technical and professional materials (textbooks, journal articles, handbooks, and procedure manuals).
- Follow oral and/or written instructions in standard English in order to correctly perform laboratory test procedures.
- Converse clearly, effectively, confidentially, and sensitively with patients regarding laboratory test orders and specimen collection instructions.
- Communicate with instructors, peers, laboratory staff, and other healthcare professionals orally and in recorded format in standard English.

Intellect

The MLT student must:

- Possess the following intellectual skills: comprehension, reasoning, integration, analysis, comparison, self-expression and self-analysis.
- Be able to exercise sufficient judgment to recognize errors and take appropriate corrective actions.

Behavior

The MLT student must:

- Be able to organize work and manage the use of time in order to complete technical tasks within realistic time limits.
- Effectively use his or her intellect to exercise appropriate judgment in a distracting environment under stressful circumstances..
- Be flexible and creative and adapt to professional and technical change.
- Follow established safety procedures in order to minimize risk of injury to self and coworkers.
- Adapt to working with unpleasant biological specimens.
- Be supportive of peers and healthcare professionals in order to promote a team approach to learning, task completion, problems solving, and patient care.
- Be honest and forthright about errors.
- Be able to critically evaluate his or her own performance, accept constructive criticism, and be responsible for improving performance.
- Be compassionate and ethical.

If you are not certain that you will be able to meet these requirements, or know of anything that, currently or in the future, might affect your ability to fulfill these functions, please contact the **Office for Students with Disabilities** to discuss your individual situation and/or request a specific accommodation.

Bunker Hill Community College is committed to provide equal access to the educational experience of all students in compliance with Section 508 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1994. Any student with a documented disability requiring an accommodation should immediately speak to the professor. Students with disabilities, who have not already done so, should schedule an appointment at the Office for Students with Disabilities (Room E222) in order to obtain appropriate services.

PROGRAM DESCRIPTION

In addition to professional MLT courses, the curriculum includes courses in the basic sciences, mathematics, social sciences, and the humanities. The professional MLT courses consist of theory as well as routine laboratory procedures and tasks in the areas of hematology, clinical microbiology, immunohematology, chemistry, immunology and serology, and urinalysis.

Students spend the first two semesters and 1 summer in traditional classroom study on the Charlestown campus. As the basic academic education progresses, more technical courses are added each semester. Each of the MLT courses includes a laboratory component.

Because the MLT program includes a practicum experience, enrolled students are required to complete a Criminal Offender Record Information (**CORI**) check in accordance with Massachusetts state law. Massachusetts law permits clinical agencies to require CORI checks for all employees and/or volunteers who have direct or indirect contact with patients and/or clients. Agencies reserve the right to refuse and/or reject students who do not meet acceptable CORI guidelines. Please refer to the College catalog for more information about the CORI process.

The practicum experience of the Program is in the last semester and is 16 weeks in duration. The time spent in each of the four major laboratory departments provides the first major contact with the real world of laboratory work. By the time the practicum begins, the student has completed all didactic courses and student laboratory training. In order to progress to the practicum, the student must have completed all previous courses, maintaining a "B- (80) average in all courses. Students are typically assigned to one clinical facility for the entire practicum. The student experiences at the affiliates are essentially equivalent with the same learning objectives being used at each, however, there will be some differences based on test menu and instrumentation used at the various institutions.

The purpose of the practicum is to focus on the application of principles and to broaden and refine clinical skills to the point of producing competent, productive employees. The clinical instructors give no formal lectures during the practicum. The Clinical Coordinator will communicate weekly with the clinical sites, via email, and make monthly site visits to monitor student progress.

The practicum generally starts the first week of September in the final semester of the program and ends the third week of December. There may be a second start date, depending on the affiliate schedule, that will occur no later than April of the final semester. Students that have the later start date will be allowed to participate in graduation ceremonies, but will not officially be considered graduated until the successful completion of the practicum coursework.

In the event that the agreement between an affiliate and the College ends during a particular Practicum, the student will be allowed to complete the clinical rotation.

2. ADMISSION AND PROGRAM REQUIREMENTS

DEGREE REQUIREMENTS

The total time required to complete the degree requirements is typically four college semesters. General Education and Science courses may be taken at any time, even prior to admission to the Program. Once admitted, all MLT courses must be taken in the prescribed sequence, including the prerequisites, in order to progress through the Program.

Upon completion of the program, students are eligible to sit for a national certification examination. The certification of choice for most employers is through the American Society of Clinical Pathology Board of Registry (ASCP). Massachusetts does not require a state license, though a number of states do. Completion of the MLT Program is not contingent upon passage of any external certification examination

The Program Director will maintain contact with all graduates for the first year following graduation. Please make sure you have a valid telephone number, address, and email on file. The purpose of this contact is to compile statistics for program accreditation. Statistics for Registry Pass/Fail and employment rates, as well as student satisfaction with placements must be compiled and submitted yearly to the accrediting agency. You will be sent a survey form within that first year. Please complete the survey and return it to the College in the return envelope. You will be helping future graduates of the program.

ADMISSION REQUIREMENTS AND PROCESS

Bunker Hill Community College is committed to an open admission policy. This policy offers the opportunity to enroll to those who have earned a high school diploma, a GED or an associate degree or higher and who express a desire to pursue a college education. To enroll in a degree program, students must apply for admission and be accepted to the College. Students choosing this option are referred to as “degree-seeking students.”

All students admitted to a degree program are required to take computerized placement tests (CPTs) in English, reading, and mathematics, or may be required to take the ESL placement tests if English is their second language. The tests determine the levels at which students will begin their study. Based upon tests results, the College may prescribe developmental or ESL courses. Applicants to health careers and technical programs must comply with specific program entrance requirements and application deadlines

Admission to the Medical Laboratory Technician Program

Admission to the program will be highly competitive. The rigor of the coursework to be mastered necessitates that only students with a strong background in math and the sciences will be considered for application.

To be admitted to the program prospective students must:

- Submit a high school diploma or GED certificate indicating successful completion of the program.
- Submit a transcript (high school or college transferring form) indicating that the student has taken and passed, with a C+ or better, coursework in algebra, chemistry, and biology.

Program prerequisites:

- Possess a high school diploma or GED certificate.
- Attend a mandatory information session.
- Complete college placement tests in reading, math, and English. Potential candidates must place in the 10th grade level or higher for each subject.
- If remedial coursework is needed students should be advised to take ESL 098, ENG 095, RDG 095, and MAT 097
- Prior to being considered for admission to the Program, students must have successfully completed with a grade of C+ or better, the following courses:
 - BIO 203 Anatomy and Physiology I with Lab
 - Bio 204 Anatomy and Physiology II with Lab
 - Bio 205 Microbiology with Lab
 - Chem 120 and 121 Organic/Inorganic Chemistry with Lab
 - ENG 111 College Writing

- MAT 181 Statistics

Applications will not be processed until all prerequisites are successfully completed.

If a student is transferring from another school, he or she must have taken and passed, with a C+ or better, a comparable course that meets the criteria of one of the above courses. The course should have been taken within the previous five years to be considered current. If the transferring student fails to meet the above criteria, he or she must take one of the above courses at BHCC.

Admission process schedule

- The Program will start in September of the year of acceptance.
- Those students who have expressed an interest in the program must attend a mandatory Information Session, time and dates are listed on flyers found at the Registration Desk in the main lobby of the B – Building, and also listed on the College website.
- The selection process will begin at the end of May of the year of possible acceptance and close mid to late June. This will allow prospective candidates the opportunity to complete their prerequisites in order to be considered for selection

Please Note: Application to the Program will begin in October during the Fall Semester, and close in June. The closing date for Health Professions applications is available at the Registration window.

- The selection process will be made based on the following rubric:
 - Grades attained in prerequisite courses.
 - The grades attained in general education and science courses that are applicable to the MLT curriculum.
 - Related coursework or a degree obtained at previous four year school that would indicate the probability of success in the Program.
- Notification of selection will be made between the middle of June and the beginning of July.
- Once the class roster has been selected, future applicants will be placed in the pool for the next academic year. There will be no late acceptances.
- The number of applicants selected is dependent on the number of available clinical sites.
- Candidates will have to notify the College of their intent to accept no later than the end of July. Failure to meet the deadline will be construed to mean the candidate has chosen not to accept.
- In the event that there are more qualified candidates than available spots, the prospective candidate will be notified that they are on a wait list. The wait-listed candidate will be notified that they will be admitted to the program, as soon as an available slot opens.

- Wait-listed students are encouraged to start taking non-program related courses while they are waiting for admission.

Recommended courses prior to enrollment in the Program

If the student is on a wait list, the Program Director may recommend that the student take one or more of the following courses prior to being formally admitted to the program. Successful completion of the course(s) does not mean automatic admission into the program, but will make the candidate more competitive in the decision making process. Successful completion will also lessen the course load burden of the candidate when admission to the program occurs.

- ENG 112- College Writing II
- World View (a course from Area III) – Menu selection – courses involving Sociology, Politics, Ethics, Economics, and World Civilization

REQUIREMENTS FOR ACCEPTED STUDENTS

All accepted students and wait list students are required to attend an orientation session to be held at the end of July or the beginning of August just prior to the semester of acceptance. Notification of date and time will be included in the acceptance letter. Attendance to the orientation session is mandatory for acceptance into the program.

At the orientation, the student will:

- Provide a government issued photo ID for a CORI check.

Note:

MLT courses must be taken in the semester listed.

General education courses may be taken at any time during or before admission to the program unless it is a prerequisite for a particular program course.

All MLT, required courses and General Education courses must be completed prior to the clinical practicum

STUDENT ADVISING

All students will be assigned a MLT faculty advisor. The faculty advisor will meet with the student each semester to discuss progression through the curriculum and plan for future course work. The faculty member will keep confidential records of all discussions.

MLT COURSE DESCRIPTION

MLT 101 Introduction to Clinical Laboratory Science (4 Credits)

This course explores the nature and scope of clinical laboratory work. The primary focus will be on the role of the laboratory in delivery of healthcare in various settings, emphasizing historical background, types of health care facilities, regulatory agencies affecting laboratory operations, responsibilities, duties and professional conduct expected of clinical laboratory technicians, safety in the laboratory, laboratory mathematics and quality control. A phlebotomy workshop will develop the fundamental skills required to procure and prepare blood specimens for testing. This course also explores the principles and procedures of the routine urinalysis as well as the normal and abnormal physiological functions of the renal system. The course consists of didactic sessions and laboratory sessions where normal and abnormal cellular constituents will be reviewed.

MLT 211 Hematology (4 Credits)

This course explores the theory and practice of routine hematology. Topics include the collection and handling of clinical specimens, the origin, development, and function of human blood cells in health and disease, hemostasis, and coagulation, automation, and quality control. Routine hematology and coagulation testing will be emphasized.

Prerequisite: Introduction to Clinical Laboratory Science

MLT 212 Medical Microbiology (4 Credits)

This course is a comprehensive study of both theory and practical aspects of clinical microbiology. Emphasis will be placed on the collection and handling of clinical specimens as well as the primary isolation and identification of the most frequently encountered bacterial, pathogenic to humans. Other topics discussed include antimicrobial chemotherapy and host resistance. Other organisms examined include fungi and parasites.

Prerequisites: Introduction to Clinical Laboratory Science, Microbiology with Lab (BIO 205)

MLT 213 Immunology and Serology (4 Credits)

This course introduces the theoretical principles of immunology which involve the structure, function, and interactions of the immune system. The serological techniques useful in the diagnosis of many diseases will be reviewed and performed.

Prerequisites: Introduction to Clinical Laboratory Science

MLT 241 Immunohematology (4 Credits)

This course consists of the study of the genetic basis and immunological interaction of the major blood group antigens and antibodies. Topics will include compatibility testing, antibody screening and identification techniques, blood donation, transfusion therapy, record keeping, and quality control techniques.

Prerequisite: Introduction to Clinical Laboratory Science, Immunology and Serology

MLT 242 Clinical Chemistry (4 Credits)

The primary focus of the course is the biochemical analysis of blood and body fluids in health and disease. Topics include routine manual and automated testing methods, electrophoresis, molecular techniques, safety practices and quality control.

Prerequisite: Introduction to Clinical Laboratory Science, Principles of Inorganic and Organic Chemistry with Lab, Immunology and Serology

MLT 251 Clinical Laboratory Sciences Practicum (12 Credits)

This course consists of Practicum experiences at one of the College's clinical affiliates, designed to supplement and expand on the knowledge that the student has acquired during the prior semesters at the College.

Prerequisite: Successful completion of all Program coursework

Note:

- The practicum is 16 weeks long and will require student participation five days a week for eight hours per day. Students should arrange their personal schedules to meet these expectations.
- The practicum will begin approximately the second week of September in the fourth semester, and finish approximately the second or third week of December. (Actual dates will be determined by the College's academic calendar).
- As part of the Practicum experience, students must come to the College at the end of their shift on the Monday after completing a rotation. Testing on the just completed rotation will take place
- The week prior to the start of the practicum, students will attend a mandatory pre-clinical week at the College.
- The week immediately following the practicum, students will attend a post-clinical sessions to present case studies that they have prepared during their clinical experience.
- During the post-practicum sessions, students will be able to take practice Registry-style exams in preparation for the Board of Certification exam.

3. SUCCESSFUL PROGRESSION THROUGH THE PROGRAM

RULES OF BEHAVIOR FOR THE MLT CLASSROOM

- Cell phones are prohibited in the classroom or the student laboratory. If an emergency occurs that requires the use of a cell phone, the student must step outside the classroom.
- Eating is prohibited inside the MLT lab.
- Students entering the classroom more than 15 minutes late during a test will not be able to begin the test at that time.
- Disruptions to the class will not be tolerated. This includes talking, note-passing, and rude and/or inappropriate behavior.
- Children of students may not be brought to class during times of instruction or laboratory.
- Any materials that are needed to be printed by the student should be printed at home or in the computer lab. All handouts that are given to the students are also available online through the BHCC Portal or Moodle.
- If absent, it is the student's responsibility to obtain missed work.
- An excused absence will not be recorded as an absence, however, excessive requests (greater than two), will be recorded as unexcused. Use your excused absences wisely.
- Calculators cannot be shared during a test or quiz. Cell phones that have calculator capabilities cannot be used as a substitute for a true calculator.
- Take care of personal business before entering class room or lab.
- Cheating is never acceptable. **All plagiarism and/or cheating will result in an F in the course, dismissal from the program and ineligibility for readmission to the program.**
- **A successful student attends class regularly, takes notes, participates in classroom instruction, completes assignments and knows when to ask for help.**

ASSIGNMENTS, HOMEWORK, PROJECTS

Students are expected to be prepared to discuss the topic being presented during class time. Written homework, when assigned, will be discussed and corrected at the beginning of the next scheduled class. Late or incomplete assignments will not be accepted. Home assignments will be due for the next scheduled class.

Note: No handwritten assignments will be accepted (unless otherwise specified). All assignments must be typed.

- All assignments, homework, projects, etc must be completed in full and on time. A failure to comply could result in the following penalties:
 - deducting grade points for missing deadlines
 - grade of "0" for incomplete work
 - remaining after hours to complete assignments

- A habitual or sustained disregard for assignment deadlines or completion could jeopardize the student's standing in the Program as the result of unacceptable grades, which will result in one of the following:
 - probation until assignment completion
 - dismissal from the class
 - dismissal from the program

DIDACTIC COURSE EVALUATION

The grading systems and the objectives to be used in each MLT course are included on the course syllabus provided to students at the first meeting for each course. Exams, lab practicals, study questions, or any other criteria to be used in grading are marked and returned to the students promptly.

The didactic courses (courses taught on campus) will include at least, but not limited to, unit tests, assignments, laboratory practicals, daily/pop tests, and a final examination. In some courses, rather than a giving a separate laboratory practical, each written test includes some laboratory procedures. Instructors are available outside of regularly scheduled laboratory time to assist with mastery of laboratory skills. It is the student's responsibility to seek additional help.

Each MLT course will have a didactic and a laboratory grade component. The student is required to maintain a **B-** grade or better for each component of the course to be considered for advancement to the next course or practicum. **If a student has less than a "B-" in any course at mid-term, a conference with the Program Director is advised.** If any questions or concerns arise pertaining to your grade do not hesitate to ask the instructor or Program Director.

Letter Grade	Quality Points
A = 94 -100	4.00
A- = 90 - 93	3.70
B+ = 87 - 89	3.30
B = 83 - 86	3.00
B- = 80 - 82	2.70
C+ = 77 - 79	2.30
C = 70 - 76	2.00
D = 60 - 69	1.00
F = 0 - 59	none

Evaluation for Laboratory Sessions:

For each practice session the student will demonstrate:

- Cognitive knowledge of the procedure being performed (Why you are doing the test).
- Technical performance that demonstrates an ability to perform the task at hand.
Mental skills as well as physical or psychomotor skills may need to be demonstrated as part of the completion of the task.

Laboratory behavior

During wet demonstrations or laboratory sessions, all students will adhere to the safety standards of the College, as well as those of the CDC, and, OSHA, and, maintain Standard Precautions. Students will report any hazards, potential hazards, or injuries to the instructor immediately.

LABORATORY SAFETY

- Note the location of all safety devices. (You will be shown how to use them)
- Leave aisles free of any obstruction.
- No food or drink is allowed in the room during lab time.
- Long hair and loose or baggy clothing must be tucked out of the way or pulled back.
- No open – toed shoes or sandals are allowed during lab time.
- Young children or pets are not allowed in the laboratory.
- Personal Protective Equipment (eye shield, gloves, lab coat or apron) must be worn when manipulating specimens.
- Wash the work area with disinfectant (i.e. 10% Bleach) at the beginning and end of a lab session.
- Wash your hands with soap at the beginning and end of a lab session.
- Regular trash **does not** go into biohazard waste bags. Only trash that is contaminated with body fluids is to be placed in the red biohazard bags. Broken glass or needles are to be discarded into a **Sharps** container.
- Report any splatter or injury to the professor immediately

Exposure Control Plan

General Policies:

Students are expected to follow standard precautions and safe practice guidelines as recommended by CDC and OSHA in the classroom, labs and at clinical sites.

Sharps and Sharps Containers:

1. Standard Precautions are to be practiced in the lab at all times.
2. The following items shall be considered sharps and disposed if in a sharps container:

- a. Syringes with and without needles
 - b. Phlebotomy needles and butterflies
 - c. Ampoules
 - d. Evacuated tubes
 - e. Vials
 - f. Lancets
 - g. Broken glass
3. The sharps container will be kept in close proximity to students working with sharps.
 - a. Sharp objects that are contaminated with potentially infectious material are not to be handled
 - b. Contaminated sharps are to be immediately discarded into an approved sharps container displaying the biohazard symbol.
 4. All phlebotomy supplies will be maintained within a locked cupboard when not in use.
 5. Sharps containers will be sealed when 2/3 or 3/4 full and placed in the lab storage room. The designated person for Bunker Hill Community College will arrange for pickup by the licensed waste facilities.
 6. Test tubes containing blood are to be placed (capped) into a biohazard (red) bag. The bag will be placed in the lab storage room in a hard sided container at the end of each lab session. When full, the designated person for Bunker Hill Community College will arrange for pickup by the licensed waste facility.
 7. Urine containers are to be emptied in the sink after the lab session. The tops will be secured back onto the containers before discard. Urine containers may be discarded with the regular trash provided that there is no identifiable patient information on the label.

Student Education:

Students are educated on the following:

1. Standard precautions, the use of personal protective equipment (lab coats, gloves, masks, protective eyewear), and hand washing.
2. Proper disposal of sharps – no needle recapping.
3. Proper disposal of hazardous waste.
4. Transmission – based precautions for airborne droplets.
5. Procedure for reporting needle stick injuries.

Needle Stick and Blood Spill Injury Policy:

1. Clean wound thoroughly using soap and water.
2. Wash eyes carefully with water.

3. Apply Band – aid.
4. **Report needle stick to instructor** who will report incident to Program Director in a timely manner.
5. **Fill out incident report.** The incident report will be filed in the Sharps Injury Log.
6. Incident reports will be kept on file for a period of no less than five years.
7. Report to the ER or your health care provider as soon as possible for assessment and treatment.

Housekeeping:

1. In the event of an accidental spill of any blood or other potentially infectious material, the affected area (floor, wall, equipment, bench top), will be cleaned and decontaminated.
2. The contaminated paper towel will be disposed of in a biohazard bag.
3. A 1:10 dilution of bleach will be used for decontamination.
4. The diluted bleach must be made fresh at the beginning of every lab session and stored in a correctly labeled squeeze bottle.
5. Bleach will be left on the contaminated surface for a minimum of 20 seconds before wiping with a paper towel.
6. Any article contaminated with potentially infectious material is placed in a red biohazard bag, securely tied and sent to the prep room for autoclaving. Bunker Hill Community College is registered with the EPA and follows its guidelines as to weighing the waste and its disposal.

Infectious Waste Management:

The following disposables will be used:

1. Lab Coats
2. Gloves
3. Pipette tips
4. Test tubes
5. Lab wipes

Disposable items will be placed in biohazard bags if visibly contaminated with blood and secured and disposed of as biohazardous waste. If not soiled with blood lab coats may be disposed of in the regular trash bag. This bag must be secured and may be discarded with regular refuse.

Physical Environment:

Engineering and work practice controls in combination with personal protective equipment are in compliance with OSHA standards currently in effect as of October 9, 2008.

Hand washing facilities are readily available to students and faculty using the laboratory space.

Attendance:

Absences or tardiness are not permitted, both in the classroom and Practicum.. Students not present for a particular class or Practicum day are required to make up the material for the missed class. **More than three absences will result in the student receiving the next lowest full letter grade for the course.** Attendance will be recorded.

Required Textbooks:

The student is directed to the individual syllabus for the textbooks that are required for each course, in addition, the College Bookstore can provide the student with a list of books being used in each course It is recommended that the student retain the textbook at course completion. They will serve as reference texts during the Practicum. In addition to texts, the Program has secured licenses for several online learning websites. These sites will be used as supplemental material and completion of some of the end-of-module quizzes will be included in the computation of the final grade in the course that they have been assigned. The student will be assigned a user name and password. These will be valid until graduation. The student is encouraged to visit these sites often as part of the preparation for the Registry exam.

4. PRACTICUM

CLINICAL PRACTICUM

PRACTICUM GOALS

An important component of the Medical Laboratory Technician Program is the Clinical Practicum, where the students practice their acquired skills and learn new ones in a real - life working environment. The Medical Laboratory Technician (MLT) Department and the affiliated institutions work together to provide a hands - on learning experience for the students. The affiliate institutions will provide a safe working environment and instruct students in safety and clinical policies in all areas of the clinical laboratory. The Clinical Practicum is designed to be a comprehensive experience encompassing the attainment of knowledge of laboratory principles (cognitive), the development of abilities and skills necessary to perform laboratory tests (psychomotor), and the fostering of attributes and attitudes essential in today's laboratory professionals (affective).

CLINICAL PLACEMENT

The clinical practicum is spent gaining experience in one of the hospital laboratories with which the MLT program is affiliated. It is the responsibility of the student to provide his or her own transportation to the assigned hospital.

Prior to the hospital assignment, the student will be asked to list site preferences for clinical training. An effort will be made to match the student with the preferred site. However, there will be no guarantee that the student will be placed at the hospital of first preference. Placement of students will be based on academic performance in the College laboratory and classroom. The hospital may also require an interview with prospective students.

Alternate Status for Clinical Rotations

Clinical sites are located in Boston and surrounding cities and towns. Acquisition and maintenance of clinical sites is an ongoing process. If there are more students eligible to begin clinical assignments than available affiliates, spaces will be filled based on academic performance. Students who are not able to be placed at a clinical site will be placed as soon as clinical sites become available. Students who do not maintain at least a B- in the lecture and lab components of all MLT third semester courses, or have not completed their medical clearance will not be considered eligible for clinical placement.

Service Work Performed By Students

Students will perform only that service-related work which is clearly defined by clinical objectives and only during the hours of clinical assignment. After demonstrating proficiency, students may be permitted to perform laboratory procedures with qualified supervision if hospital regulations permit. All test results reported by students must be verified and initialed by a staff technologist.

Time Commitment

The Clinical Practicum is a 16 week commitment. There will be no accommodation for the students personal or employer requirements. You must be able to commit to the **16 week, 40 hour requirement.**

MEDICAL CLEARANCE

Each clinical affiliate has its own regulations for medical clearance. You will be informed as to what the requirements are for your clinical site. In general, the requirements for most clinical sites are as follows:

- Completed and up-to-date Physical Health Form
- TB Screen (skin test followed by X-ray if positive or previously positive)
- Hepatitis B (or waiver)
- TDAP (Tetnus, Diphteria, Petussis)
- MMR/Varicella (mumps, Measles, Rubella, Chicken Pox)
- Background Check (some affiliates require their own background checks in addition to College performed CORI checks)
- Drug screen (if required by affiliate)
- Flu Vaccine

INSURANCE

Many affiliates require that students have both malpractice and liability insurance. The students being placed in clinical sites are covered by blanket policies acquired by the College. The cost for these insurance policies is included in the fees paid to the College.

Note: Students will be provided with a clinical practicum handbook prior to going out on clinicals.

FAILURE OR WITHDRAWAL FROM MLT PROGRAM

It is recognized that a student may need to withdraw from the program due to grades or financial, personal or health reasons. The student may petition for readmission by following the Department Readmission Policy (see below). Please note that for all withdrawals, all graduation requirements must be completed within four years of initial acceptance. Clinical rotations must be completed within twelve months of completing technical class-work at the College. Students absent from the program more than one semester will be required to retake all the courses of the semester of departure.

Grades

Students must achieve a grade of B- or better in all MLT courses in order to progress through the program. Failure to maintain a B- grade will be considered a failure of that course and result in dismissal from the program.

- A failure in MLT 101 or MLT 213 will require the student to repeat that course and maintain a B-or better grade.
- A failure in MLT 211, MLT 212, MLT 241, or MLT 242 will result in exclusion from the Practicum. These courses are competency based, preparing the student for the Practicum. As a result, students failing any of these courses will be required the student to retake the entire semester before being recommended for a clinical placement.

Personal, Financial, Health

If the student withdraws from the program in good standing, he/she may reapply for readmission to the program according to the Departmental Readmission Policy. Before withdrawal, it is recommended that the student take advantage of the many support services available at Bunker Hill Community College (please refer to the Student Handbook).

Dismissal from the Clinical Practicum

Bunker Hill Community College expects students to behave in a manner that is appropriate to a collegiate environment. At affiliate sites, the student is expected to maintain behavior consistent with the institution. Failure to maintain a professional demeanor in the learning environment, or a failure to maintain grades in accordance with the Medical Laboratory Technician Program Matriculation policy may lead to sanctions ranging from verbal or written warnings up to suspension or dismissal. Offenses that may result in immediate dismissal include, but are not limited to:

- A student will be dismissed if grades are not in accordance with the Medical Laboratory Technician Matriculation Policy.
- A student may be terminated or denied a certificate for graduation if they do not complete the internship according to all Bunker Hill Community College MLT policies.

- **If a student is dismissed from the practicum, the student will receive a grade of “F” for the Clinical Practicum**

Behaviors that may result in dismissal from the Clinical Practicum will include, but are not limited to the following:

- Inadequate academic and technical competency
- Cheating
- Plagiarism
- Violation of patient confidentiality
- Excessive absenteeism
- Constant tardiness
- Theft (regardless of amount) or dishonesty
- Threatening, intimidating, or coercing patients or others
- Violation of any hospital policy
- Unauthorized possession of weapons, firearms, or explosives on premises
- Conviction of a felony
- Willful damage of hospital equipment or property
- Immoral or indecent conduct
- Physical assault/battery on employees or patients during working hours or anywhere on Hospital premises
- Deliberate omission or falsification of information on timesheets or hospital records
- Possessing, consuming or being under the influence of intoxicants, narcotics, or non-prescribed barbiturates on the premises
- Excessive absence of scheduled clinical days in any department. (See attendance policy)
- Willful acts or conduct detrimental to patient care or hospital operations that result in neglect or abuse of any patient
- Insubordinate acts or statements, or failure to carry out orders
- Unauthorized copying of hospital records, including patient medical charts
- Violation of safety standards that could result in harm to patients, employees or major damage to equipment

Failure or withdrawal from MLT Clinical Practicum courses

If the Clinical Practicum must be repeated, the student must seek readmission to the program. If readmitted, it is preferred that the practicum be repeated in a different affiliate. The Laboratory manager and clinical instructors will be informed of the reason the practicum must be repeated and may require an interview with the student. All of the student's records pertaining to the prior practicum experience will be available to the Laboratory manager of the new site. Following consultation with the clinical affiliate, Bunker Hill Community College assumes the final responsibility for the decision concerning acceptance or rejection of a student for repetition of the practicum. The affiliate shall have the sole discretion regarding acceptance of any student previously discharged by a clinical affiliate for any reason that would make acceptance of said student inexpedient. Students

will be allowed to repeat a practicum only if clinical space is available after non-repeating students are assigned clinical spots. Repeating students have the lowest priority for clinical space. Repetition of the practicum will be allowed only once.

Policy for Readmission to the Medical Laboratory Technician Program

Students who have previously matriculated into the Medical Laboratory Technician Program may be readmitted once. To apply for readmission students must do so in writing to the Program Director by November 30 for the Spring semester or by April 30th for the Fall semester. Any student who is absent from the program for more than 2 years will have to begin the program of studies at the first MLT course.

Students who leave the MLT Program in good standing (with a grade of B- or better in all MLT courses) should apply in writing to the Program Director with a statement attesting to the reasons why the MLT program was interrupted and the proposed date for resumption of coursework.

Students who have been dismissed from the program due to cheating will not be able to apply for readmission.

Students who leave the MLT Program after failing a course(s) or withdraw when failure is imminent must meet with the MLT faculty at the time of failure/withdrawal to identify areas of weakness and develop a plan of remediation. One copy of the remediation plan is given to the student. A second copy is kept on file with the faculty members.

Students applying for readmission after failure/imminent failure will submit, in writing to the Program Director, a letter of reapplication prior to the admission deadline date. The student will include in this letter: a written statement and attach documentation (grades for courses) that the remediation plan recommendations were completed.

All applications for readmission will be reviewed by the Program Director and the MLT faculty. Students will be readmitted on a space-available basis according to the following priorities:

1. Students who successfully completed previous MLT coursework.
2. Students who withdrew while passing previous MLT coursework
3. Students who withdrew while failing previous MLT coursework
4. Students who previously failed MLT coursework.

In the event that a student believes extraordinary circumstances have occurred that interfered with MLT program success, that student has the right to petition the Department Chair for a second readmission. The Academic Review Committee, composed of the Program Director and program faculty will make the final decision.

- Students who failed MLT courses in year one (MLT 101 and/or MLT 213) will be required to repeat the course that they failed to maintain a B- or better grade.

- Courses offered in semester three are designed as competency based, preparing the student for the Practicum. A failure to maintain a B- average in any of the courses offered (MLT 211, MLT 212, MLT 241, MLT 242) will necessitate a retake of all the courses of semester three before being approved for the Practicum.

RESOLUTION OF PROBLEMS

When individual concerns arise between students and faculty, the concern should be discussed with the faculty member first. If the concern is unresolved, a meeting will be held with the student, the involved faculty member, and with the Program Director.

(Note: Please refer to Student Handbook in the Student Code of Conduct section for a full discussion of the grievance procedure and Code of Conduct.)

The Student Grievance Procedure may be used by a student to address complaints concerning the alleged abridgement of the student's rights as stated in the College's Student Handbook. This procedure is followed either when the student is at the College or at the affiliate. If the incident takes place at the affiliate, the student must inform the Program Director or Clinical Coordinator directly in a timely fashion, so that the appropriate actions can be taken to resolve the problem. The Educational Coordinator at the affiliate institution will submit a written report to the Program Director or Clinical Coordinator supplying information concerning the grievance. Complaints or grievances filed in connection with assigned grades or with faculty are directed to the Academic Dean. Most problems are resolved at the informal (Level 1) level. If the student is not satisfied with the outcome, he or she may submit a formal written complaint to the Dean of SEHP. (Please refer to the Student Handbook).

PROGRAM CLOSURE – TEACHOUT PLAN

Intentional closure of the BHCC MLT program will be communicated to all students immediately.

Prospective students:

- Students will be informed that the program will not take a new class.
- Program closure information will be posted on college website.

Current students:

- First semester students
 - Students will be informed of program closure.
 - If closure is announced mid-semester students will be allowed to complete MLT courses.
- Students will be counseled regarding alternative BHCC majors or transfer to another college.

Second semester students

- Students will be informed of program closure.
- If closure is announced mid-semester students will be allowed to complete MLT courses

- Students will be counseled as to alternative BHCC majors.
- Students will be assisted in applying to other local MLT programs.

Third semester students

- Students will be informed of program closure.
- If closure is announced mid-semester students will be allowed to complete MLT courses.
- MLT faculty will work with clinical sites and other community colleges to facilitate completion of the clinical practicum.

Fourth semester students

- Students will be informed of program closure.
- If closure is announced mid-semester students will be allowed to complete the clinical practicum.
- A college official will be designated to clear students applying for the certification exam.

CERTIFICATION AND LICENSURE

Upon completion of the program, students are eligible to sit for a national certification examination. Although there are several certification agencies, local preference of employers is for certification

CERTIFICATION AND LICENSURE

Upon completion of the program, students are eligible to sit for a national certification examination. Although there are several certification agencies, local preference of employers is for certification through the American Society of Clinical Pathology Board of Certification (ASCP). The Program instructors will provide information on the application procedure and cost. The student may contact the ASCP directly at:

:

American Society for Clinical Pathology
 Board of Certification
 33 West Monroe St. Suite 1600
 Chicago, IL 60603
www.ascp.org

Tel: 312-514-4887

Pass/Fail Results are received immediately and numerical scores are received within several weeks. You may be employed as “registry eligible” before taking the examination or receiving scores. Massachusetts does not require a state license, although a number of states do. Refer to the state licensing agency if you plan to seek employment in a state that requires licensure. Your ASCP certification will usually stand as proof of competency until you can fulfill the requirements of licensure.

Completion of the Program is not contingent on passing any external Certification exam.

APPENDIX

MEDICAL LABORATORY TECHNICIAN PROGRAM
Student Handbook Agreement

I have read and understand the information provided in the MLT Student Handbook and have had an opportunity to ask questions about this material and have had those questions answered to my satisfaction.

I am able to comply with the listed Technical Standards/Essential Functions for the MLT Program. I understand that failure to follow any of the policies within the Student Handbook may result in my dismissal from the Medical Laboratory Technician Program.

I agree that while enrolled in the Medical Laboratory Technician Program, I will treat my studies, labs, and clinical practicum as an employee would treat job responsibilities, recognizing that my instructor assumes the role of my supervisor. I will attempt to learn not only the technical skills required of a MLT, but also strive to develop professional behaviors and attitudes.

Student: _____ Date: _____
(Print)

Student: _____
(Signature)

Medical Laboratory Technician Program

Laboratory Safety Agreement

As a student enrolled in a laboratory course at *Bunker Hill Community College*, I have read, understand, and agree to observe all safety regulation as listed in the syllabus, and supplemental handouts. I also agree to follow all verbal instructions of the instructor and **agree to wear acceptable personal protective equipment when their use is indicated**. I understand that if I violate any safety regulation, I may be asked to leave the lab and will accept a zero score for the lab exercise that I was working on. I also acknowledge that continues disregard for safety on my part will result in my being dropped from the course.

Course Title: _____

Course Number: _____ Section: _____

Instructor: _____

Semester _____ Student ID # _____

Student Name: _____

Date: _____

Signature: _____