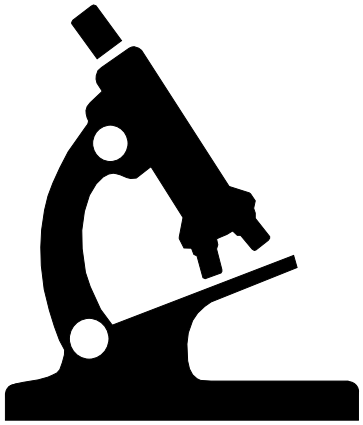
MEDICAL LABORATORY TECHNOLOGY PROGRAM



STUDENT HANDBOOK

REVISED: June 2024

INTRODUCTION

The Medical Laboratory Technician

Welcome to the fascinating world of laboratory medicine. Modern medicine is dependent upon the teamwork of pathologists, technologists, scientists, and technicians in the clinical laboratory. As a vital member of the health care team, Medical Laboratory Technicians (MLTs) perform a variety of complex biological and chemical analyses on patient specimens to assist the physician in the prevention, diagnosis, treatment and monitoring of disease. Under the supervision of the medical laboratory scientist, pathologist or physician, the MLT incorporates troubleshooting skills and problem-solving techniques to perform procedures in microbiology, blood banking, chemistry, immunology/serology, hematology and urinalysis in a variety of health care settings. MLTs utilize sophisticated instruments, computers, automated equipment, and complex methodologies to produce accurate and reliable test results.

Proper patient treatment depends upon an accurate diagnosis. Today, more than ever, physicians rely on laboratory test results in the diagnosis as well as in the treatment of disease. As a vital member of the clinical laboratory team, the Medical Laboratory Technician performs an integral role in the delivery of quality health care.

The Medical Laboratory Technology Program

The Medical Laboratory Technology Program (MLT) of Pierpont Community and Technical College offers an Associate of Applied Science Degree. The program is administered by a Program Director in accordance with the policies of Pierpont Community and Technical College, recommendations from the MLT Advisory Committee, and the Standards of the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS), 5600 North River Road, Suite 720, Rosemont, Illinois 60018-5119, phone: 773-714-8880, website: www.naacls.org. Upon successful completion of the required curriculum, graduates are eligible for national certifying examinations for medical laboratory technicians or clinical laboratory technicians.

The MLT program is currently affiliated with several medical institutions, including: Davis Memorial Hospital, Elkins; Grafton City Hospital, Grafton; Grant Memorial Hospital, Petersburg; J.W. Ruby Memorial Hospital, Morgantown; Louis A.

Johnson V.A. Medical Center, Clarksburg； Mon Health Medical Center, Morgantown; Preston Memorial Hospital, Kingwood; St. Joseph's Hospital, Buckhannon; Stonewall Jackson Hospital, Weston; Summersville Regional Medical Center, Summersville; Webster Memorial Hospital, Webster Springs; Wetzel County Hospital, New Martinsville; United Hospital Center, Bridgeport; and Uniontown Hospital, Uniontown, PA. Clinical affiliates may be added or dropped at any time. A current listing of clinical affiliates is maintained in the office of the MLT Program Director or Clinical Education Coordinator.

In addition to general studies and a common core of School of Health Science courses, 42 credit hours are required in clinical lecture and student laboratory sessions. These courses are coordinated with approximately 560 hours (approximately 15 weeks) of clinical laboratory practical experience.

MLT Program Faculty

Melissa White, Professor/ MLT Program Director
Erika Rush, Associate Professor/ Clinical Education Coordinator
Leah Ellyson, Program Assistant II for the School of Health Sciences

MISSION, GOALS AND OUTCOMES

It is the goal and mission of the MLT Program to provide the student with a course of study which incorporates both theoretical knowledge and technical skills needed for entry into the field of clinical laboratory sciences and fosters the development of good communication skills and creative and analytical abilities. The students are provided with a total educational experience by integrating the college general education common core courses into a science-oriented curriculum. The curriculum is designed to correlate theory and technique in the cognitive, psychomotor, and affective domains.

The program is designed to instill in the student the realization that continuing education is a necessity in developing a sense of professionalism. Students are encouraged to continue their education, and the program is so designed that graduates can career ladder to the baccalaureate level through other four-year institutions.

Program Goals.

The goals of the Medical Laboratory Technology Program include:

(1) Graduating students with entry level competencies to enter the profession,

(2) Demonstrating compliance with current essentials of the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS),

(3) Providing an opportunity for students to gain necessary clinical and technical skills in all relevant areas of the laboratory, including chemistry, hematology, microbiology, which includes mycology and parasitology, immunohematology, urinalysis, serology, coagulation, phlebotomy and safety practices,

(4) Promoting student awareness of professional conduct, medical ethics, interpersonal skills including compassion with patients and communication with other healthcare professionals,

(5) Providing graduates with the necessary academic preparation to qualify for a Certifying Examination,

(6) Promoting student recognition for the need of continuing education and acting upon that need as a function of growth and maintenance of professional competence.

Graduate Outcomes

The following outcomes are expected of students who successfully complete the MLT program of study

Graduate Outcomes	**Direct Measures of Assessment**	**Satisfactory Performance Standard**
1. Demonstrate knowledge of and competence in performing test methodologies and assume responsibility to safely perform modern clinical laboratory tasks expected of an entry level MLT/CLT	Student course averages for MLAB courses	Students will attain an average score of ≥ 75% in each MLAB course
	Psychomotor Basic and Advanced Skill sheet Evaluations	Students will obtain all "satisfactory" on Basic Skills and with ≥2 on a 4 point scale on Advanced Skills
	BOC Certification	Meet the national average pass rate (75%) for the MLT(ASCP) exam or other national certification exam

2. Communicate verbally and nonverbally with the patient, physicians, health care delivery personnel and peer in an effective, appropriate and capable manner	Psychomotor Basic and Advanced Skill sheet Evaluations	Students must attain an average score of ≥75% or higher in communication on the Psychomotor Basic and Advanced Skill sheet
	Clinical Affiliate Survey of MLT Program	Clinical Affiliates score students ≥2 on a 4 point scale for professional attributes.
3. Demonstrate professional behavior that reflects appropriate responsibility and professional standards that are legal, confidential, ethical and safe.	Psychomotor Basic and Advanced Skill sheet Evaluations	Students must attain an average score of ≥75% or higher in communication on the Psychomotor Basic and Advanced Skill sheet
	Affective objectives evaluation	Students will score all "satisfactory" on the affective objective evaluation
	Written case study Poster Presentation	Students will earn ≥ 75% on a written case study and on a poster presentation in the capstone course.
4. Differentiate between normal and abnormal laboratory test results and correlate laboratory findings to common disease processes and assay variability	Clinical Affiliate Survey of MLT Program	Clinical Affiliate score students as fair, good or excellent (≥ 2 on 4 point scale) for academic preparation and technical preparation.
	Employer Survey	Graduates will score an average of ≥ 3 on a 5 point scale or satisfactory for the item "correlate disease and data"

SCOPE OF PRACTICE

Clinical laboratory professionals, as members of the health care team, are responsible for:

- Assuring reliable test results, which contribute to the prevention, diagnosis, prognosis, and treatment of physiological and pathological concerns and includes:
- Producing accurate test results
- Assessing and improving existing laboratory methodologies
- Designing, evaluating, and implementing new methodologies
- Integrating, correlating, and interpreting test data
- Designing and implementing cost-effective administrative and quality control procedures for laboratories, services, and personnel

- Designing, implementing, and evaluating processes for education and continued education of laboratory personnel
- Developing and monitoring a quality assurance system to include:
- Quality control of services
- Competency assurance of personnel
- Promoting an awareness and understanding of the profession to laboratory personnel, related professions, and to the consumer/ public

ADMISSION AND REQUIREMENTS

Admission Requirements

Admission into the Medical Laboratory Technology, A.A.S. program is based upon the following criteria:

- Apply to Pierpont Community and Technical College for the term you want to begin the program and meet the general admission requirements or be a current student
- First-time students should select "Medical Laboratory Technology" as their educational goal on their application.
- Current students will need to complete a Change of Major form and select "Medical Laboratory Technology" (AAS)" as their requested major.

Qualified students are accepted until capacity is met. Students can begin the program in the fall semester.

All career and technical courses and programs are offered at Pierpont regardless of race, color, national origin, gender, or disability. Pierpont Community and Technical College is an equal opportunity, affirmative action institution.

Program Requirements

Medical Laboratory Technology is an open enrollment, competitive program. To complete the program, students are required to:

- Complete a criminal background check which is clear of all felony and Class I misdemeanors
- Complete a drug screen which is negative for drugs of abuse, alcohol, and non-prescribed medications
- Meet health requirements and essential functions
- Be able to provide their own transportation to assigned clinical sites.

Students begin the program in the fall semester and are required to complete the following open enrollment courses. These courses contain prerequisite content in biological sciences, chemistry and mathematics that provide the foundation for course work required in the laboratory science program.

- BIOY 1170
- BIOY 1171
- CHM 1101
- MLAB 1101
- MLAB 1102
- MTH 1207

Students must complete each of these courses with a "C" or better to be eligible to continue in the program. **The following spring semester is competitive due to MLT program capacity. If the program reaches capacity (currently 18 students), the top 18 students, based on grade point average of the 6 courses listed above, are eligible to continue in the program. The second semester (spring) comprises the MLT cohort entering MLT major restricted courses.**

(Students should also complete ENGL 1104 in the first semester to follow MLT Model schedule)

Any students not selected will have the option of continuing into one of a variety of programs, including, but not limited to, the "Medical Laboratory Assistant - Certificate of Applied Science" program and the "Health Sciences – Associate of Applied Science" program.

Students are required to complete each of their courses throughout the program with at least a "C" or better and maintain a 2.0 GPA. Any classes accepted as substitutes for curricular classes also require a grade of "C" or better. Failure to meet any of these requirements will result in dismissal from the program. Students who have been

dismissed due to academic failure or cohort capacity can return the next academic year to reattempt progression in the MLT Program.

Clinical Requirements

The Medical Laboratory Technology Program takes pride in its safety program which follows national guidelines published by the Occupational Safety and Health Administration (OSHA), the Center for Disease Control (CDC), and the Environmental Protection Agency (EPA).

To participate in clinical practicum courses at the clinical affiliates, students must complete numerous requirements to assure general health and safety at the clinical facility.

- Behavioral and social skills acceptable to the hospital setting
- Good general health as evaluated by a physician during a physical examination
- Appropriate vaccinations for: a current tetanus toxoid, MMR, varicella, and Hepatitis B vaccine series; **and** rubella, mumps, measles, varicella, and hepatitis surface antibody test demonstrating sufficient antibody titer to indicate immunity. The titers may be submitted in lieu of the Hepatitis B vaccine series
- Other Immunizations as required by clinical affiliate
- Seasonal influenza immunization
- A drug screen which is negative for drugs of abuse, alcohol, and non-prescribed medications
- A current CPR card – BLS American Heart Association course
- PPD testing or results of an IGRA
- Background check – clear of felony and class I misdemeanors
- Health insurance
- Ability to transport self to numerous laboratory sites for practical experience

The clinical requirements must be completed in the time frame outlined by the clinical education coordinator during MLT student orientation and through later correspondence. All MLT students are required to be **vaccinated for Hepatitis B prior** to contact with human blood or other potentially infectious materials ***(prior to***

***second semester of program)*.** Students refusing the vaccination must sign a copy of the Hepatitis B Vaccination Declination form. The form will be placed into the student file.

All clinical requirements must be completed prior to admittance to the clinical affiliate. Late or missing clinical requirements will result in a delay of the student's clinical practicum and can result in failure or loss of clinical placement.

Essential Functions

To participate in a medical laboratory science educational program, qualified individuals must be able to perform the program's designated essential functions with or without reasonable accommodations. Essential functions for acceptance into the MLT program and clinical practica experiences are included below:

Essential Observational Requirements for the Clinical Laboratory Sciences

- Visual acuity to perform macroscopic and microscopic analyses and to read procedures, graphs, charts, etc.
- Ability to visually differentiate colors

Essential Movement Requirements for the Clinical Laboratory Sciences

- Good motor skills, eye-hand coordination, and dexterity
- Ability to transport self to numerous laboratory sites for practical experience.
- Perform moderately taxing continuous physical work, which includes prolonged sitting or standing over several hours, and frequent lifting and/or carrying of objects weighing up to 10lbs with a maximum of 25lbs.
- Maneuver phlebotomy and culture acquisition equipment to safely collect valid laboratory specimens from patients which requires coordination of both gross and fine muscular movement, equilibrium, and functional use of the senses of touch and vision.

Essential Intellectual Requirements for the Clinical Laboratory Sciences

- Comprehend, measure, analyze and synthesize various materials
- Be able to exercise sufficient judgment to recognize and correct performance deviations

Essential Communication Requirements for the Clinical Laboratory Sciences

- Communication skills adequate for transmitting to and receiving information from patients and hospital personnel
- Ability to understand and follow verbal and written instructions to correctly perform laboratory test procedures.

Essential Professional Skill Requirements for the Clinical Laboratory Sciences

- Be able to work independently and as part of a healthcare team
- Manage time efficiently
- Behavioral and social skills acceptable to the hospital setting

References:

Fritisma, G.A., Fiorella, B.J., and Murphy, M., **Essential Requirements for Clinical Laboratory Science,** Clinical Laboratory Science, Vol. 9, No. 1, Jan/Feb 1996, p. 40-43.

ASCLS, **Becoming a Clinical Laboratory Professional**, Essential Functions, accessed 9/1/2020 at **https://www.ascls.org/careers-ascls/how-do-i-become-a-laboratory-professional**

Course Requirements

Only students in the MLT cohort are eligible to register for MLT courses after the first semester of the program. First semester courses of the MLT Model Schedule (MLAB 1101 & 1102) are open enrollment and can be used as electives for the Pierpont AAS in Health Sciences. Prior to the beginning of the second year of study, first semester courses for the MLT program must be satisfactorily completed (grade of "C" or better in all courses with overall GPA ≥ 2.0) and the student must be in the top 18 GPA for the designated courses for cohort determination (see Program requirements). All courses required by the MLT Program must be completed with a grade of "C" or better to continue in the program and to graduate.

DISABILITY GUIDELINES

Disability Services

As required by Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990, reasonable accommodations may be provided for students whose disabilities may affect their pursuit of a college education. For information or to arrange for services, students must contact the 504 Coordinator for Students who is located at the ATC, Room 121, Support Services, Office of Disability and Counseling Services, 304.534.7878, or email **access@pierpont.edu**

Students should be aware that:

1. The college does not assume responsibility for providing accommodations or services to students who have not identified themselves as having a qualifying disability.

2. It is the student's responsibility to voluntarily disclose information regarding the nature and extent of their qualifying disability to the 504 Coordinator for students.

3. It is also the student's responsibility to inform faculty of the accommodations by providing them with a copy of the Accommodation Letter given to the student when an intake is completed with the Office of Disability Services. The letter must be provided to the instructor at the beginning of each semester to receive accommodations throughout the semester.

4. Students who encounter problems regarding accommodations should notify the Office of Disability Services immediately.

Credits for Prior Learning

Pierpont grants credit for prior learning through a variety of methods including military training, advanced placement exams, advanced standing, articulation, CLEP exams, credit by examination and portfolio examination. No more than fifty percent of a degree can be earned through prior learn credit, except for the WV state Board of Governors Associate of Applied Science degree.

COLLEGE LEVEL EXAMINATION PROGRAM (CLEP)

CLEP (the College-Level Examination Program®) offers 34 exams that cover intro-level college course material. CLEP was created to help individuals with prior knowledge in a college course subject earn their degree efficiently and inexpensively. That prior learning could have taken place through advanced high school courses, independent reading and study, online courseware or textbooks, noncredit courses, or on-the-job training.

How to Purchase and Schedule a CLEP Exam

- Choose a CLEP exam online directly from the website – **clep.collegeboard.org**
- Create an online account and submit your payment through the My Account portal.
- The cost per CLEP EXAM is $89. Note: Make sure you use your name as it appears on your official ID. Pay with a debit or credit card
- Contact Pierpont's Testing Center to schedule your exam at **304-368-7254** or by email **lhuffman8@pierpont.edu** There is an additional administration fee of $40.

Browse, register, and purchase study materials for credit-granting exams and find more information at clep.collegeboard.org

ADVANCED STANDING AND PLACEMENT

Pierpont Community & Technical College recognizes certain examinations of the College Board Advanced Placement Program. Students who participate in AP the program and wish to have their scores evaluated for credit should have their scores sent from the College Board to Pierpont Community & Technical College. The AP examinations are prepared by the College Board, and the papers are graded by readers of the Educational Testing Service, Princeton, NJ 08540. Students cannot receive credit for a score below 3 on any exam. Students who do receive credit will be assigned the grade of CR, which is not calculated into the GPA. A comprehensive list of courses which have an AP examination can be found in the Pierpont academic catalog.

WITHDRAWAL

Students considering withdrawing from the Medical Laboratory Technology Program for any reason, should schedule an appointment for an exit interview with their advisor to discuss appropriate procedures. It is the responsibility of the student to follow the official college policy for withdrawal. This is especially important for any student who may decide to reapply to the Medical Laboratory Technology Program or return to the college in the future.

ACADEMIC DISMISSAL

To remain in and graduate from the MLT program, a student must **earn a "C" grade or above in every required class in the MLT curriculum and maintain an overall cumulative GPA of 2.0.** Any classes accepted as substitutes for curricular classes also require a grade of "C" or above. GPA's are reviewed each semester. Failure to meet any of these requirements will result in dismissal from the program. Students who have been dismissed for academic reasons may reapply to the program and their credentials will be reevaluated.

READMISSION

Readmission to the Medical Laboratory Technology Program will be determined on an individual basis. The decision will be made based on the availability of space in the cohort formed in the second semester of the program. All requirements must be met for readmission. The student will need to follow the course catalog and MLT Student Handbook policies of the year they are readmitted. Students who must withdraw from the program due to unsatisfactory academic performance are generally only readmitted once. Students who (voluntarily or involuntarily) withdraw from the program AND seek readmission AND three-or-more years has lapsed since the successful completion of any MLAB courses, will be required to retake the MLAB courses of the current MLT curriculum. Standards of practice change; students are expected to be up to date on current standards of practice. Additionally, when students are readmitted, they are expected to fulfill/update the student clinical requirements.

ADVISORY SYSTEM

Each MLT student will be assigned a faculty advisor who is a member of the MLT faculty. The primary role of the advisor is to assist the student in selecting appropriate classes to meet the program requirements. All students are assigned an academic advisor after enrolling at Pierpont. Students can find their advisor in their ROAR account under student information. If you can't find your advisor or are having trouble connecting with your advisor, please reach out to advise@pierpont.edu.

The advisor assists advisees in selecting courses needed to meet program requirements. However, it is the responsibility of each student to schedule an appointment with his/her advisor prior to the pre-registration period. Medical Laboratory Technology faculty are available for student advising and maintain regular office hours. These hours are made by appointment or are posted on bulletin board in Room 103 (locker area) of ATC.

Although it is not necessary for students to have an appointment with faculty members during posted office hours, prior scheduling of any meetings requiring more than a few minutes of time is highly recommended. Scheduling an appointment will ensure that the student has adequate time to meet with his/her advisor and circumvent problems that might occur when more than one student desires a conference at the same.

Degree Works is an electronic tool designed for students and advisors to review your degree progress. A web-based program, Degree Works reorganizes your transcript chronologically and categorically, easily identifying courses you have completed and courses you still need to fulfill your degree requirements.

CAREER LADDERING AND ELECTIVES

Students may choose to register for elective courses in addition to those required in the MLT curriculum. Those students interested in pursuing a baccalaureate degree should consider the general studies requirements and the requirements for a B.S. in their desired field and discuss these options with their advisor prior to registration.

Students interested in Career Laddering, advancing from a Medical Laboratory Technician to a Medical Laboratory Scientist, should consult their advisor for information on appropriate courses of action to consider in completing this process. Presently, graduates from the MLT program at Pierpont Community and Technical College are eligible for the Career Laddering Program leading to a B.S. degree in Medical Laboratory Science from Marshall University, West Liberty University and many other online MLT to MLS programs. Students must contact the MLS program of their choice to inquire about any specific or recommended additional courses needed. **MTH 1212: College Algebra is strongly recommended for students intending to pursue a bachelor's degree and subsequent certification as a Medical Laboratory Scientist (MLS). MATH 1207 does not count towards the general studies requirement in science and mathematics for those students intending to pursue a bachelor's degree.**

GRADING SYSTEM

Letter Grades

Letter grades for all MLT courses, including didactic (lecture and student laboratory sessions) and clinical practicum courses are determined according to the following scale:

A.....93 to 100 percent
B.....84 to 92 percent
C.....75 to 83 percent
D.....70 to 74 percent
F ..... Below 70 percent

Grades in didactic courses are based upon periodic quizzes, examinations, and assignments. Grades for clinical practicum courses are based upon quizzes, determination of unknowns and evaluations of student performance.

Grade Point Average (GPA)

To remain in and graduate from the MLT program, a student must earn a "C" grade or above in every required class in the MLT curriculum and maintain an overall cumulative GPA of 2.0. Any classes accepted as substitutes for curricular classes also require a grade of "C" or above. Failure to meet any of these requirements will result in dismissal from the program. Students who have been dismissed may reapply to the program or consider continuing into one of a variety of programs, including, but not limited to, the "Medical Laboratory Assistant - Certificate of Applied Science" program and the "Health Sciences – Associate of Applied Science" program. To graduate from the MLT program, a student must have a cumulative GPA of at least 2.0. GPAs are reviewed each semester.

To begin the second year of full-time study in the MLT Program, a student must have at least a "C" grade in all MLAB courses, at least a "C" grade in all required curricular courses or substitutes for those courses and a cumulative GPA of 2.0. During the second year of study, students are permitted to repeat one failed (a letter grade of "F") clinical practicum course without penalty but may be delayed in graduation due to the time needed to repeat the clinical practicum.

Failure to meet any of these criteria will result in academic dismissal from the program. Any student dismissed from the program should refer to the withdrawal and

readmission policy in this handbook. Following the appropriate procedures is extremely important if the student is considering reapplying to the program.

ACADEMIC DISHONESTY

Any student that is charged with academic dishonesty may appeal the decision first with the instructor, then the Dean, followed by the Academic Appeals Committee and finally the Provost/Vice President of Academic Affairs. According to the School of Health Sciences **Academic Dishonesty Policy**: Academic dishonesty is defined to include, but is not limited to, any of the following:

1. Plagiarism is defined in terms of proscribed acts. Students are expected to understand that such practices constitute academic dishonesty regardless of motive. Those who deny deceitful intent, claim not to have known that the act constituted plagiarism, or maintain that what they did was inadvertent are nevertheless subject to penalties when plagiarism has been confirmed. Plagiarism includes, but is not limited to, submitting, without appropriate acknowledgment, a report, notebook, speech, outline, theme, thesis, dissertation, or other written, electronic, visual, or oral material that has been copied in whole or in part from the work of others, whether such source is published or not, including, but not limited to, another individual's academic composition, compilation, or other product, or commercially prepared paper.

2. Cheating and dishonest practices in connection with examinations, quizzes, papers, and projects, include, but are not limited to:

    1. Obtaining help from another student during any graded assignment (including but not limited to examinations, quizzes, and on-line assignments).

    2. Knowingly giving help to another student during any graded assignment (including but not limited to examinations, quizzes, and on-line assignments), taking an examination or doing academic work for another student, or providing one's own work for another student to copy and submit as his or her own.

3. The unauthorized use of notes, books, or other sources of information (including cell phones) during examinations.

4. Obtaining an examination or any part thereof without authorization.

3. Forgery, misrepresentation, or fraud includes, but is not limited to:

1. Forging or altering, or causing to be altered, the record of any grade in a grade book or other educational record.

2. Use of documents or instruments of identification with intent to defraud.

3. Knowingly presenting false data or intentionally misrepresenting one's records for personal gain.

5. Knowingly furnishing the results of research projects or experiments for the inclusion in another's work without proper citation.

6. Knowingly furnishing false statements in any academic proceeding.

Penalties for academic dishonesty are decided by the course instructor and program coordinator. Instructors will initiate a Charge of Academic Dishonesty and notify the student within 5 days of discovering the infraction. The process will follow institutional guidelines of Academic Affairs which are viewable in the PCTC course catalog.

ATTENDANCE POLICY

The School of Health Sciences has adopted the following Attendance Policy: ***Students are required to attend all class meetings as defined in the course syllabus. Students missing 10% of the class meetings will receive a written warning. Students missing 20% or greater will be asked to withdraw from the course or earn a final grade of "F".***

Students are expected to attend all classes, including lectures and student laboratory sessions. Attendance is an important component of professionalism and is necessary for successful completion of a course of study and is an integral part of a

student's educational experience. The attendance policy for each course in the MLT curriculum is also included in the course syllabus. Policies may, however, be revised at the beginning of each semester**. If an absence is necessary**:

- The student must discuss the absence with the instructor **before** the next scheduled class.
- Cancellation of classes at Pierpont CTC campuses due to weather or other emergencies will not be counted as an absence.
- **The student is responsible for any information, assignments and work missed**. The instructor is not required to provide makeup lectures, quizzes, demonstrations, field trips, assignments or laboratory sessions.
- In order to be excused from an examination or quiz, the student must speak to the instructor **prior** to the scheduled examination.
- Make up examinations must be completed by the next class meeting after the scheduled exam.
- Work and assignments missed (including quizzes) due to absences or tardies will receive a grade of zero (0).
- **Students who are more than fifteen minutes late to class are considered tardy and will not be allowed to begin tests or quizzes.**
- **After two tardies, each subsequent tardy will count as one absence.**
- Student absences in clinical practicum courses is explained in the attendance policy available in the *MLT Clinical Practica Handbook*. Absences will be dealt with on a case by case with **students making up the time they have missed.**
    - Students will not be scheduled for practicum assignments during holidays scheduled by Pierpont CTC without student consent. Students may, however, find it necessary and convenient to schedule any make up days with clinical affiliates during holiday breaks or between semesters.
    - Any make up days must be scheduled with the approval and convenience of the clinical affiliates and with prior notification given to the MLT Clinical Education Coordinator.
    - Cancellation of classes due to weather or other emergency situations that affect only the Pierpont CTC campus is <u>not</u>, considered an excused

absence for students scheduled at clinical affiliates. Students are expected to report to their clinical assignments as usual but should use their own judgment regarding attendance during these times.

- Students are generally scheduled for 8 hours a day with 1/2 hour for lunch and two 15-minute break periods, 5 days per week at the clinical affiliates. Students are expected to follow the work schedule at the facility to which they are assigned. Starting times may vary from facility to facility. Occasionally, students may be required to report to their assigned affiliate at a different time or to extend their quitting time beyond what is normally scheduled to complete all competencies.

CLASSROOM CONDUCT

Class Participation

All students are expected to constructively participate in all class activities. In general, constructive participation means those acts or activities that contribute to the educational progress of the class. Constructive participation includes, but is not limited to:

- offering constructive comments
- asking questions that enhance class progress and
- requesting clarification when clarification is needed.

Non-constructive behavior includes, but is not limited to the following:

- sleeping, doodling, reading non-class material
- talking to other students
- creating disturbances that distract themselves and others from the class activity.
- Texting or other electronic devices for non –class related purposes (cell phones are not allowed to be out during class)

Class Arrival and Departure

Students are expected to arrive in class in a timely manner. Except for serious reasons beyond their control, students should remain (actively) in class for the entire class period. If you have a serious or important reason (medical, family) for an early exit from class, see the instructor before the event. Walking out of a class in session is a distraction

and disrupts your own learning. Medical, legal, or academic appointments (if at all possible) should be made during non-class times.

Conduct During Class

All students should conduct themselves such that their own learning and the learning of other students is enhanced. Students should exhibit no behavior that would detract from this goal.

- No student should attend class under the influence of alcohol or illegal drugs.
- Students should bring textbooks, notebooks, and writing materials to all classes unless notified by the instructor.
- Weapons, radios, beepers (unless required), or other items not appropriate for instruction should not be brought to class.
- No guests are allowed; children and other visitors are not to be brought to class.
- **Cell phones must be turned off during class time, are not to be in campus labs and are not to be taken to clinical areas during clinical practica.** In case of emergency where the student may need to be reached the student should notify the instructor before the class or day begins so that a plan of action may be established. **Violation of the cell phone rules will cause removal from campus lecture and labs and <u>dismissal from the clinical affiliate.</u>**

STUDY HABITS

Most collegiate courses require more work outside of the classroom in the form of independent review of material, reports, library research, etc., than high school. Therefore, MLT students carrying a full load of college courses will generally find that they must devote more time to studying, completing assignments and preparing for classes than they were accustomed to in high school to maintain the same GPA.

Although class work requires a great deal of time, extracurricular activities are an important part of the collegiate learning experience. A proper balance between curricular and extracurricular activities should be established. A successful student learns to establish a definite schedule for study time and activities and works according to that

schedule. Managing time effectively will allow each student to take full advantage of opportunities available through both class work and extracurricular activities.

Each student should determine how much time he or she needs to devote to study as well as the best time of day and the best place for study and adjust his/her study time to that time of day. **Pierpont's Learning Strategies** webpage has many helpful workshops to assist students in forming good study habits, time management skills and test taking tips. Please visit the learning strategies website:
https://sites.google.com/view/pierpont-learning-strategies-2

Also, there are Student Success Workshops that will help you develop your skills both in and out of the classroom. Experts from colleges all over the country deliver mini lessons on specific college success skills, from developing study skills to how to be successful in an on-line class to how to stay on top of your budget. There are 41 workshops to choose from, and each one has related readings and activities. Certificates of completion are available for each workshop.
https://www.pierpont.edu/resources/student-success-workshops/

UNIFORM AND PROFESSIONAL ATTIRE

Proper attire must be worn at all times during MLT student laboratory sessions and during clinical practicum courses. Full length, buttoned laboratory coats are required for all MLT student laboratory sessions on campus. Shoes must be acid resistant, e.g., leather, closed-toed and heeled; sandals are not permitted in the student laboratories. If the shoes have laces, they must be tied. Dangling jewelry, unsecured long hair on both men and women and excessively long beards on the male students are considered a potential hazard in the laboratory and are prohibited in the MLT student laboratory sessions. Gloves and safety glasses are available for student use when appropriate.

Students must observe the above attire requirements for the clinical practicum courses as well as any additional requirements established by the clinical affiliates. Institutions are requiring that all laboratory personnel wear professionally laundered or disposable laboratory coats. For your protection and the protection of others, laboratory coats are not to be worn outside of the clinical affiliates. Safety precautions require beards and mustaches to be closely trimmed, long hair to be secured and appropriate

gloves to be worn when handling specimens. In addition, all students are required to always wear an identification badge while in the clinical affiliates.

The regulations described above are based upon policies established by the clinical affiliates and the MLT Program at Pierpont Community and Technical College. Students failing to adhere to these policies will not be permitted in the student laboratories on campus or in the laboratories of the clinical affiliates.

Students are responsible for purchasing uniforms for clinical practica and lab coats for campus and clinical classes. The MLT program and clinical affiliates provide gloves and face shields for daily use. The college or clinical affiliates provide identification badges for all students.

STUDENT MLT ASSOCIATION

The Student Medical Laboratory Technology (MLT) Association is an officially recognized campus organization. Its purpose is to unite Medical Laboratory Technology students and alumni: thus, promoting further interest in and understanding of the profession. Past activities of the organization have included: participation in the West Virginia Society for Clinical Laboratory Science Fall Meeting, hosting blood drives, Community service activities, promoting fund raisers to obtain monies for projects, trips, and social functions and inviting guest lecturers to speak at related activities. Dues are $5.00 per year. The Student MLT Association elects four officers per class, President, Vice-president and Secretary and Treasurer.

ASCLS MEMBERSHIP

Students are strongly encouraged to become members of the American Society for Clinical Laboratory Science (ASCLS), the national professional organization. Members of ASCLS are entitled to:

- a network of clinical laboratory professionals
- programs, webcasts, CD's and online course offerings that provide continuing education credits through hundreds of quality programs on topics of critical interest
- discount on the ASCLS Annual Meeting and Exposition
- a peer-reviewed professional journal, *Clinical Laboratory Science,* and a newsletter, *ASCLS Today,* which includes society events and developments in the industry

- professional representation in Washington, D.C. regarding laboratory laws and regulations
- a voice and a vote in the West Virginia Society for Clinical Laboratory Science (WVSCLS) Student Assembly

Members may also be eligible to serve as student delegates to the annual national meeting and convention with expenses covered by the WVSCLS. The West Virginia Society for Clinical Laboratory Science also provides scholarships for student ASCLS members. Additional information regarding student delegates and scholarships as well as application forms may be obtained from any ASCLS member or MLT faculty.

OUTSTANDING MLT STUDENT AWARD

An award ceremony is held each year to recognize students who have demonstrated exceptional abilities and talents in a specific academic area of the college. The Outstanding MLT Student Award is presented to a graduating student at this awards ceremony. The candidate for the award is chosen by the MLT faculty and is based upon academic excellence in the classroom and outstanding performance in the clinical practicum. The student, his/her family and the faculty of the program are invited to the ceremony.

LIABILITY INSURANCE

Pierpont Community and Technical College carries liability insurance for students in clinical practicum courses. Coverage includes $1,000,000 for each occurrence. The College covers the complete cost of the insurance for the student. This insurance does not apply when students are engaged in activities other than those sponsored by the Medical Laboratory Technology Program or the college.

HEALTH INSURANCE

Pierpont Community and Technical College does not provide individual health or accident insurance; therefore, students must be covered by a health insurance before entering the MLT clinical practicum courses. **Students are responsible for any**

expenses incurred as a result of illness or accidents including those that might occur in clinical practicum courses at the affiliates. The clinical affiliates of the MLT program do not provide health or accident insurance for students but will administer emergency treatment if required. The student is responsible for the cost of any necessary treatment. A health insurance form will be completed by students during the first semester of classes with **evidence of personal health insurance required during clinical practicums.**

CLINICAL PRACTICUM

Purpose

The purpose of the clinical practicum experiences is to provide students with an opportunity to integrate and apply previously acquired knowledge and technical skills in an actual clinical setting. Under the guidance of experienced laboratory personnel and health professionals, students learn more about diagnostic test procedures, quality control methods and programs, and instrumentation in the clinical laboratory, and gain an understanding of the roles and functions of the Medical Laboratory Technician and other health care professionals.

During the second year of the MLT Program, students gain laboratory experience in clinical affiliates in the areas of clinical chemistry, hematology, microbiology, blood banking (immunohematology), serology, clinical microscopy including urinalysis and phlebotomy.

Assignment of Clinical Practicum Sites

Assignment of clinical practicum sites is made by the MLT Program Director and the Clinical Education Coordinator. Assignments are made according to the Assignment of Clinical Practicum rules (see sheet). Students must be prepared to attend an affiliate site which may require travel time. Students are expected to make their own travel arrangements. Failure on the part of the student to fulfill his/her clinical practicum obligation constitutes withdrawal from the MLT Program. Students unwilling or unable to travel to the assigned site will be required to drop the clinical practicum courses.

Assignment to a facility for clinical experience is based as much as possible upon the personal and geographical preferences of the student. However, due to limitations in site availability, students cannot always be assigned to a facility of their choosing. Students are responsible for providing transportation to the clinical affiliates. The cost of transportation, parking, meals, and appropriate clothing are the sole responsibility of the student. All students will abide by the clinical dress codes distributed prior to clinical practicum assignments. Students will be issued name tags for their affiliates and the name badges should be returned to the affiliate upon completion of training. No reimbursements will be made for any costs incurred.

Service Work Policy

Students in the Medical Laboratory Technician Program at Pierpont Community & Technical College are not allowed to be substituted for regular staff in performing laboratory testing. MLT students should be supervised in the clinical setting, and only allowed to perform testing on samples that are reported out after demonstrating competency, always under the direct supervision of the voluntary clinical preceptor working in that department. This policy pertains to students during their assigned clinical rotations. Students choosing employment by healthcare facilities must work hours other than those assigned as clinical rotation hours and regular academic hours for the MLT Program. The Service Work Policy Acknowledgement form will be signed by the student and clinical affiliate laboratory manager at the start of clinical practicums.

Attendance

Students are generally scheduled for 8 hours a day with 1/2 hour for lunch and two 15-minute break periods, 5 days per week at the clinical affiliates. Students are expected to follow the work schedule at the facility to which they are assigned. Starting times may vary from facility to facility. Occasionally, students may be asked to attend their assigned affiliate at an earlier or later time than designated by the schedule to view a certain procedure. This is an optional activity.

Tardiness and early dismissals without a valid reason will not be tolerated. **Students should rearrange outside work time so that it does not conflict with clinical assignments.** Early dismissals must be approved by the clinical coordinator at the assigned affiliate.

For further information regarding absences in clinical practicum courses and cancellations of classes at Pierpont Community and Technical College due to weather or other emergencies refer to the Attendance Policy in the *MLT Clinical Practica Handbook*. Students are permitted to repeat one failed (a letter grade of "F") clinical practicum course without penalty.

Clinical Placement Rules and Protocols for Accepted Part-time Students

The definition of a part-time student is any student who is enrolled and accepted into a specific MLT class year but chooses not to complete the program in the necessary 22 months and does not graduate with that class. This definition does not hold for students who reapply to the program and are accepted into a new class year. Rules and regulations for part-time students include:

1. Part-time students cannot register for any Clinical Practicum course (MLAB 2221, 2222, 2223 or 2224) until they have successfully completed all MLT course requirements, excluding MLAB 2995.
2. Part-time students must be willing to attend MLAB 2221, 2222, 2223 and 2224 on a consecutive Monday through Friday basis, for eight hours a day.
3. Part-time students are worked into the Practicum assignments (MLAB 2221, 2222, 2223 and 2224) on a space available process. There is no guarantee for immediate placement once the required program courses are completed. All accepted full-time MLT students are given priority into clinical assignments.
4. Part-time students are prioritized for clinical placement based on their start date in the program. Part-time students are ranked according to GPA. If more than one part-time student has the same start date, is ready to begin clinical assignments, and space is available, the student with the higher GPA will be placed first.

Disciplinary Proceedings

Any problem with a student while in the clinical affiliate should be handled as follows:

1. The clinical instructor and student should discuss the problem. If they cannot work out a solution, then the Clinical Coordinator at the clinical facility is consulted.
2. The site Clinical Coordinator should record the incident in writing to be placed in the student files and discuss the problem with the clinical instructor and the student seeking a resolution of the problem.
3. The site Clinical Coordinator should inform the Clinical Education Coordinator at Pierpont Community and Technical College. The Clinical Education Coordinator should complete an incident report and place it in the student's file. (Most problems can be handled by the site Clinical Coordinator. However, in exceptional circumstances where the student's standing in the program or in the clinical affiliate is in jeopardy the Clinical Education Coordinator should be consulted as soon as possible.)
4. When appropriate, the Clinical Education Coordinator consults the Program Director who refers the case to the Vice President for Student Affairs for academic discipline, if necessary. At that time the proceedings will follow the Disciplinary Proceedings in the *Pierpont C&TC Student Handbook.*

Clinical Affiliates

Clinical sites affiliated with the MLT Program include:

Davis Memorial Hospital…….....…….….....…Elkins, WV

Grafton City Hospital…….. Grafton, WV

Grant Memorial Hospital …… Petersburg, WV

J.W. Ruby Memorial Hospital …… Morgantown, WV

Louis A. Johnson VA Medical Center..... Clarksburg, WV

Mon Health ……. Morgantown, WV

Preston Memorial Hospital..... Kingwood, WV

Stonewall Jackson Memorial Hospital ..... Weston, WV

St. Joseph's Hospital..... Buckhannon, WV

Summersville Regional Medical Center..... Summersville, WV

United Hospital Center, Inc. ..... Bridgeport, WV

Uniontown Hospital……..Uniontown, PA

Webster County Memorial Hospital……Webster Springs, WV

Wetzel County Hospital…….New Martinsville, WV

Since clinical affiliates may be added or removed due to student need, a current listing is maintained in the office of the MLT Program Director and MLT Clinical Education Coordinator.

STUDENT CONDUCT

Standards of conduct are addressed in the *Pierpont C&TC Student Handbook.* Students who do not abide by the policies outlined may be subject to disciplinary action.

MLT students are expected to abide by the Code of Ethics of the American Society of Clinical Laboratory Science as listed in the *MLT Student Handbook*. In addition, rules of conduct which apply specifically to training in the clinical affiliates are listed in the *MLT Clinical Practica Handbook.* ***Examples of unacceptable conduct include:***

1. Violation of clinical affiliate or college rules or policies
2. Repetitive infractions of standard of conduct expected of students
3. Deliberate or careless damage or misuse of materials or institutional property
4. Theft
5. Behavior endangering or threatening life, safety or health of the patients or others in the clinical affiliates
6. Abuse of break periods or lunch periods
7. Abuse of non-smoking areas
8. Initiating fights or other incidents where physical contact or threat of physical contact is involved
9. Violation of dress or health code
10. Failure to keep hospital and patient information confidential
11. Taking the property of a hospital employee or another student

Following an offense of the Pierpont Code of Conduct, any student, faculty member, staff member, administrator, or a concerned party may bring a complaint to the attention of the Pierpont Chief Judicial Officer (CJO). Persons who plan to bring a complaint against a student should notify the offices as quickly as possible. These policies are outlined in the Pierpont Student Handbook under “Code of Conduct”.

Violations of program and affiliate professional conduct will be addressed with a written warning, first. There will be a documented discussion between the student and

MLT Clinical Education Coordinator regarding the violation. Further violations may result in dismissal from the program. The student can appeal the decision following the appeal policies in the Pierpont Student Handbook.

STUDENT GRIEVANCES AND APPEALS

Academic regulations

Academic regulations and policies concerning grievances and appeals are listed in the *Pierpont Community and Technical College Student Handbook* which can be found online at **Student Handbook - Pierpont Community and Technical College - Modern Campus Catalog™**

These procedures follow the State College System of West Virginia Board of Director Guidelines.

Students in the program must maintain an overall cumulative GPA of 2.0 and earn a "C" grade or above in every required class in the MLT curriculum. Any classes accepted as substitutes for curricular classes also require a grade of "C" or above. GPAs are reviewed each semester. Students failing to maintain the 2.0 GPA must withdraw from the program but may reapply according to program guidelines. Graduation from the program is not contingent upon passing a national certification exam. Students with grievances or appeals may follow the procedure in the *Pierpont Community and Technical College Student Handbook.*

Personal and Group Conduct

Standards of personal and group conduct, including student disciplinary offenses as well as hearings and appeals procedures may also be found in the *Pierpont C&TC Student Handbook.* Student misconduct which adversely affects the college community's pursuit of its educational objectives is subject to disciplinary action.

Grievances and appeals which arise at the clinical sites are resolved, if possible, in the following manner:

- The student and technician working with the student should attempt to resolve the problem. If this fails,

- The site Clinical Coordinator will help resolve the problem in conjunction with the student and technician working with the student. If this fails,

- The Clinical Education Coordinator will attempt to resolve the problem in conjunction with the student, site Clinical Coordinator and technician working with the student. If this fails,

- The Program Director will attempt to resolve the problem in conjunction with the student, Clinical Education Coordinator, site Clinical Coordinator and technician working with the student.

- If no resolution can be reached, the case is referred to the Vice President of Student Affairs for Academic Discipline.

Failure of a Clinical Practicum Course

All students are allowed to repeat one failed clinical practicum without penalty. If a second practicum is failed, the MLT Clinical Education Coordinator, MLT Program Director, affiliate Clinical Coordinator and student will meet to determine if the grade has been issued without personal conflict, bias or malice to the student.

If personal conflict, bias, malice or other problems exist, (such as medical problems), which make it impossible for the student to complete their rotation at their assigned affiliate, the student will be assigned to another affiliate when space and consent from the second affiliate becomes available. This allows an independent evaluation of the student by a second party.

If the second evaluation is acceptable, the student's grade is calculated using the second evaluation. If the second evaluation is not acceptable, the student will receive a grade of "F" for the clinical practicum course and will be dismissed from the program and may reapply. If the student is not satisfied, he or she may follow the college's grievance procedures.

COSTS

In addition to tuition, fees and room and board expenses incurred by students at Pierpont Community and Technical College, students of the MLT program should anticipate the following costs:

Some of the expenses that you and your family may incur in addition to tuition and fees include:

- Books and Student Laboratory Manuals
- Student Laboratory Fees
- Copy costs
- Physical Examination and Immunizations
- Laboratory Coats and Required Clothing of the Clinical Affiliate
- Cost of Transportation to Clinical Affiliates
- Meals at Clinical Affiliates
- Dues for MLT Student Organization (*optional)*
- Hepatitis B surface antigen Vaccination Series & immunity titers for all required immunizations
- Graduation Fee (if needed)
- Certification examination fee (*not a condition for program completion or graduation)*
- Background check and drug screen
- CPR training to be completed prior to clinical assignments
- Health Insurance (*during clinical practicum)*
- ASCLS membership; WVSCLS annual meeting expenses, e.g., registration, travel, meals *(Optional)*

Model Schedule for MLT

Fall First Year			***Spring First Year***		
Course	***Title***	***Credits***	***Course***	***Title***	***Credits***
CHM 1101	General Chemistry	4	ENGL 1109 or 1108	Tech Report Writing or Written English II	3
MTH 1207, 1212 or higher	Fundamental Concepts of Mathematics	3	MLAB 1105	Clin Chem Techniques	1
			MLAB 1105L	Clin Chem Techniques Lab	1
ENGL 1104	Written English I	3	MLAB 1160	Clin Microbiology I	3
			MLAB 1160L	Clin Micro I Lab	1
BIOY 1170	Anatomy & Physiology	3	MLAB 1180	Immunohematology/Serology	3
			MLAB 1180L	Immunohematology/Serology Lab	1
BIOY 1171	Anatomy & Physiology lab	1	OFAD 1150	Computer Concepts & Applications	3

MLAB 1101	Introduction to MLT	1			
MLAB 1102	Clinical Immunology	1			
	Total	***16***		***Total***	***16***

Summer I		
Course	***Title***	***Credits***
MLAB 2216	Hemostasis	1
MLAB 2217	Urinalysis & Body Fluids	1
MLAB 2217L	Urinalysis & Body Fluids Lab	1

Fall Second Year			***Spring Second Year***		
Course	***Title***	***Credits***	***Course***	***Title***	***Credits***
MLAB 2218	Hematology	3	MLAB 2222	Clinical Practicum II*	3
MLAB 2218L	Hematology Lab	1			
MLAB 2219	Clin Microbiology II	3	MLAB 2223	Clinical Practicum III*	3
MLAB 2219L	Clin Micro II Lab	1			
MLAB 2220	Clin Biochemistry	3	MLAB 2224	Clinical Practicum IV*	3
MLAB 2220L	Clin Biochemistry Lab	1			
MLAB 2221	Clinical Practicum I*	3	MLAB 2995	Seminar & Case Studies	3
	Total	***15***		***Total***	***12***
				Total Curriculum	***62***

*A total of 12 Clinical Practicum credits (15 wks) are required for graduation.
A "C" or better is required in all MLAB and program required courses.

COURSE DESCRIPTIONS

MLAB 1101 Intro to MLT 1 hr.

MLAB 1101 is an introduction to the functions and duties of a Medical Laboratory Technician (MLT), the significance of licensure, certification and registration, accreditation, laboratory safety, infection control, medical ethics, quality assurance, an overview of each area of the clinical laboratory, and professional standards of the medical laboratory technologist. Students will also learn basic techniques of venipuncture. Required for Majors. Must be taken concurrently with MLAB 1102

MLAB 1102 Clinical Immunology 1 hr.

This course covers the science of immunology and serology through the study of

theories and processes related to natural body defenses. Included are the immune response, principles of antigen-antibody reactions, and serological principles. This includes performance of serological procedures used to aid in the detection or diagnosis of certain diseases. Throughout this course, special emphasis is placed on correlating of laboratory results with the patient's probable condition. Fall semester. Required for Majors. Must be taken concurrently with MLAB 1101

MLAB 1105 - Clinical Chemistry Techniques 1 hr.
This course is designed to familiarize students with the practical aspects of the clinical laboratory. The course covers laboratory calculations, quality assurance, safety, manual and automated instrumentation, including sample analysis, patient and quality control validation, and patient and quality control charting. Two hours of lecture per week. Successful completion of this course with "C" or better is required for graduation.
Prerequisite(s): CHM 1101 with a grade of "C" or better
Co-Requisite(s): MLAB 1105L
Restriction(s): Medical Laboratory Technology majors

MLAB 1105L – Clinical Chemistry Techniques Lab 1 hr.
Students will perform procedures in the skill of phlebotomy. The lab provides the application of general laboratory principles, laboratory math, quality control and statistics, and variables affecting lab results. The students will perform testing on lab equipment and will practice the application of quality assurance and safety standards throughout the testing process. Two hours of lab per week. Successful completion of this course with "C" or better is required for graduation.
Prerequisite(s): MTH 1207 (or higher) and CHM 1101 with a grade of "C" or better
Co-Requisite(s): MLAB 1105
Restriction(s): Medical Laboratory Technology majors

MLAB 1160 - Clinical Microbiology I 3 hrs.
This course is an introduction to the study of medically important bacteria and parasites. The biochemistry, genetics, and physiology of bacteria will be discussed as well as methods of cultivation, isolation, and identification of these organisms. Life cycles of parasites and methods of identification will be studied. Three hours of lecture per week. Successful completion of this course with "C" or better is required for graduation.
Prerequisite(s): MLAB 1101 and MLAB 1102
Co-Requisite(s): MLAB 1160L
Restriction(s): Medical Laboratory Technology majors

MLAB 1160L - Clinical Microbiology I Lab 1 hr.
Students will be introduced to various microbiology equipment and their use, including the microscope. Students will practice the Identification of clinically significant parasites by their morphological characteristics. Students will perform manual procedures for the identification of pathogenic bacteria using aseptic technique and following safety procedures. Three hours of lab per week. Successful completion of this course with "C" or better is required for graduation.
Co-Requisite(s): MLAB 1160
Restriction(s): Medical Laboratory Technology majors

MLAB 1180 - Immunohematology/Serology 3 hrs.
This course introduces blood grouping and typing, antibody screening and identification, and compatibility testing. Laboratory procedures for serological and transfusion services, including the processing, storing and issue of blood components for transfusion will be emphasized. Students will study genetic principles of immunohematology, blood group systems, adverse complications of transfusion, and hemolytic disease of the fetus and newborn. Three hours lecture per week. Successful completion of this course with "C" or higher is required for graduation.
Prerequisite(s): MLAB 1102
Co-Requisite(s): MLAB 1180L
Restriction(s): Medical Laboratory Technology majors

MLAB 1180L - Immunohematology/Serology Lab 1 hr.
The lab course provides the practical application of laboratory procedures in blood bank, transfusion therapy, and serological testing for infectious disease. Three hours lab per week. Successful completion of this course with "C" or higher is required for graduation.
Prerequisite(s): MLAB 1102
Co-Requisite(s): MLAB 1180
Restriction(s): Medical Laboratory Technology majors

MLAB 2216 Hemostasis 1 hr.
This course introduces hemostasis theory including coagulation cascade, intrinsic and extrinsic pathways, thrombosis and fibrinolysis. This study will review platelet physiology, platelet coagulation disorders, other coagulation disease conditions and anticoagulant therapy. There is a focus on coagulation laboratory testing principles, including PT, INR, APTT, fibrinogen, D-dimer, FDPs, miscellaneous coagulation testing and associates hemostatic dysfunction with clinical disease. Majors only. Required. PR: MLAB 1105. Summer.

MLAB 2217 - Urinalysis and Body Fluids 1 hr.
This course introduces various properties and constituents of urine and body fluids. Students will study the theory and techniques of analyzing urine and body fluids, including the clinical significance of these analyses.
Three hours lecture per week in a 5-week Summer session. Successful completion of this course with "C" or higher is required for graduation.
Prerequisite(s): MLAB 1105, HLCA 1170, and HLCA 1171 with a grade of "C" or better
Co-Requisite(s): MLAB 2217L
Restriction(s): Medical Laboratory Technology majors

MLAB 2217L - Urinalysis and Body Fluids Lab 1 hr.
This lab provides practical application of general laboratory principles in urinalysis and on body fluids other than blood. Six hours lab per week in a 5-week Summer session. Successful completion of this course with "C" or higher is required for graduation.
Prerequisite(s): MLAB 1105, HLCA 1170, and HLCA 1171 with a grade of "C" or better
Co-Requisite(s): MLAB 2217
Restriction(s): Medical Laboratory Technology majors

MLAB 2218 – Hematology 3 hrs.
This course is designed to provide the student with an understanding of the theory and principles in normal blood cell production and blood cell disorders. The student will learn about hematologic disorders and classify these based on clinical laboratory findings. Three hours of lecture per week. Successful completion of this course with "C" or better is required for graduation.
Prerequisite(s): MLAB 2216
Co-Requisite(s): MLAB 2218L
Restriction(s): Medical Laboratory Technology majors

MLAB 2218L – Hematology Lab 1 hr.
The lab emphasizes the morphology and identification of normal and abnormal human blood cells. Applications and techniques of measurement used in performing the complete blood count, coagulation studies, and special hematological procedures will be used in the laboratory. Students will correlate laboratory findings with hematologic disease and coagulopathies, while practicing basic troubleshooting of errors and discrepancies. Three hours of lab per week. Successful completion of this course with "C" or better is required for graduation.
Prerequisite(s): MLAB 2216
Co-Requisite(s): MLAB 2218
Restriction(s): Medical Laboratory Technology majors

MLAB 2219 - Clinical Microbiology II 3 hrs.
This course is a study of bacterial, fungal, and viral disease agents which includes the clinical laboratory methods of cultivation, isolation, and identification of bacteria and fungi. Three hours lecture per week. Successful completion of this course with "C" or better is required for graduation.
Prerequisite(s): MLAB 1160
Co-Requisite(s): MLAB 2219L
Restriction(s): Medical Laboratory Technology majors

MLAB 2219L - Clinical Microbiology II Lab 1 hr.
Students will perform microbiology procedures on various cultures for cultivation, isolation, and identification of bacteria and fungi. Students will interpret clinical specimens to differentiate pathogens from normal flora. Public health, safety and quality control will also be emphasized.
Three hours lab per week. Successful completion of this course with "C" or better is required for graduation.
Prerequisite(s): MLAB 1160
Co-Requisite(s): MLAB 2219
Restriction(s): Medical Laboratory Technology majors

MLAB 2220 - Clinical Biochemistry 3 hrs.
This course emphasizes major organ function and the appropriate assays, analysis of various body fluids, and laboratory findings to indicate various disease states. This includes important characteristics of

basic chemical laboratory technique, chemical laboratory safety, electrolytes and acid-base balance, proteins, carbohydrates, lipids, enzymes, metabolites, endocrine function, and toxicology. Abnormal laboratory results will be correlated to disease states using case studies.
Three hours lecture per week. Successful completion of this course with "C" or better is required for graduation.
Prerequisite(s): MLAB 1105
Co-Requisite(s): MLAB 2220L
Restriction(s): Medical Laboratory Technology majors

MLAB 2220L - Clinical Biochemistry Lab 1 hr.
The student will perform routine clinical tests on biological fluids, maintain quality assurance records, and practice troubleshooting laboratory test and instrument problems. Three hours lab per week. Successful completion of this course with "C" or better is required for graduation.
Prerequisite(s): MLAB 1105
Co-Requisite(s): MLAB 2220
Restriction(s): Medical Laboratory Technology majors

MLAB 2221 Clinical Practicum I 3 hrs.
This course is designed to orient the students to the Clinical Laboratory. Students will be assigned to a major area of the laboratory (chemistry, hematology, immunohematology, or microbiology). Laboratory safety, specimen collection including phlebotomy, specimen processing and analysis, data acquisition, quality assurance and sample validation, instrument troubleshooting, sample reporting including calculations, charting and clinical correlation will be included. Clinical serology and urinalysis/body fluid techniques and objectives will be completed in the appropriate major department. PR: MLAB 2218, MLAB 2219 and MLAB 2220. Restrictions: MLT Majors only 120-160 hours laboratory.

MLAB 2222 Clinical Practicum II 3 hrs.
This course is a continuation of MLAB 2221. Student will be assigned to a second major area of the laboratory. Additional skills and increased competency levels in specimen processing and sample analysis, data acquisition, quality assurance and reporting will be included. Interpersonal relationships and basic techniques involving the major area of study will be emphasized. PR: MLAB 2221. Restrictions: MLT Majors only 120-160 hours laboratory.

MLAB 2223 Clinical Practicum III 3 hrs.
This course is a continuation of MLAB 2222. Student will be assigned to a third major area of the laboratory. Additional skills and increased competency levels in specimen processing and sample analysis, data acquisition, quality assurance and reporting will be included. Interpersonal relationships and basic techniques involving the major area of study will be emphasized. PR: MLAB 2222. Restrictions: MLT Majors only 120-160 hours laboratory.

MLAB 2224 Clinical Practicum IV 3 hrs.

This course is a continuation of MLAB 2223. Student will be assigned to a third major area of the laboratory. Additional skills and increased competency levels in specimen processing and sample analysis, data acquisition, quality assurance and reporting will be included. Interpersonal relationships and basic techniques involving the major area of study will be emphasized. PR: MLAB 2223. Restrictions: MLT Majors only 120-160 hours laboratory.

MLAB 2995 Seminar & Case Studies 3 hrs.

This course is designed to prepare students for successful employment hiring in the Medical Laboratory Technology (MLT) profession, including preparation for national certification. The course will also enhance critical thinking and communication skills necessary in the clinical laboratory. Each student will present a clinical case study and critique the presentations of other students. Restrictions: MLT student in final semester of program.

CODE OF ETHICS OF THE AMERICAN SOCIETY FOR CLINICAL LABORATORY SCIENCE

Preamble: The Code of Ethics of the American Society for Clinical Laboratory Science (ASCLS) sets forth the principals and standards by which clinical laboratory professionals practice their profession.

I. **Duty to the Patient -** Clinical laboratory professionals are accountable for the quality and integrity of the laboratory services they provide. This obligation includes maintaining individual competence in judgement and performance and striving to safeguard the patient from incompetent or illegal practice by others.

Clinical laboratory professionals maintain high standards of practice. They exercise judgment in establishing, performing and evaluating laboratory testing.

Clinical laboratory professionals maintain strict confidentiality of patient information and test results. They safeguard the dignity and privacy of patients and provide accurate information to other health care professionals about the services they provide.

II. **Duty to Colleagues and the Professions -** Clinical laboratory professionals uphold and maintain the dignity and respect of our profession and strive to maintain a reputation of honesty, integrity and reliability. They contribute to the advancement of the profession by improving the body of knowledge, adopting scientific advances that benefit the patient, maintaining high standards of practice and education, and seeking fair socioeconomic working conditions for members of the profession.

Clinical laboratory professionals actively strive to establish cooperative and respectful working relationships with other health professionals with the primary purpose of ensuring a high standard of care for the patients they serve.

III. **Duty to Society -** As practitioners of an autonomous profession, clinical laboratory professionals have the responsibility to contribute from their sphere of professional competence to the general well being of the community.

Clinical laboratory professionals comply with relevant laws and regulations pertaining to the practice of clinical laboratory science and actively seek, within the dictates of their consciences, to change those which do not meet the high standard of care and practice to which the profession is committed.

PLEDGE TO THE PROFESSION

As a Medical Laboratory Professional, I pledge to uphold my duty to Patients, the Profession and Society by:

- Placing patients' welfare above my own needs and desires.
- Ensuring that each patient receives care that is safe, effective, efficient, timely, equitable and patient-centered.
- Maintaining the dignity and respect for my profession.
- Promoting the advancement of my profession.
- Ensuring collegial relationships within the clinical laboratory and with other patient care providers.
- Improving access to laboratory services.
- Promoting equitable distribution of healthcare resources.
- Complying with laws and regulations and protecting patients from others' incompetent or illegal practice
- Changing conditions where necessary to advance the best interests of patients.

ACCREDITATION, CERTIFICATION, AND LICENSURE

Accreditation

Accreditation refers to the academic status of an institution or program and is a process whereby a professional organization or a non-governmental organization grants recognition to that institution or program for meeting predetermined criteria. These organizations help ensure that schools meet appropriate standards of quality. The Medical Laboratory Technology (MLT) Associate of Applied Science Program at Pierpont Community and Technical College is a nationally accredited program designed in accordance with the standards and guidelines outlined by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS) 5600 North River Road, Suite 720, Rosemont, Illinois 60018-5119, phone: 773-714-8880.

Certification

Upon completion of the required curriculum, graduates are eligible for a national certifying examination. ***Note that granting of the degree is not contingent upon passing an external certification or licensure examination. Passing an external exam is not required for graduation from the MLT program.*** Certification is usually granted by a non-governmental agency and assures that an individual has met certain predetermined standards to practice in a particular specialty. One such examination is given by the Board of Certification of the American Society of Clinical Pathologists (ASCP), website at **http://www.ascp.org**. The BOC is a separate certifying body within the organizational structure of the ASCP. The BOC formed in 2009 and is recognized as the preeminent certifying agency for clinical laboratory personnel. You must apply to apply to take the certifying exam. Those who successfully pass this examination are classified as an MLT (ASCP)^{CM} with full privileges of a certified medical laboratory technician. The faculty of the MLT Program **strongly recommend** that graduates take a certifying examination. Most clinical laboratories require some type of certification or eligibility for certification prior to employment. Graduates of the MLT program are also eligible for other certifying examinations, e.g., American Medical Technologists (AMT), and, if interested, should contact an MLT faculty member for further information.

Licensure

Licensure involves the granting of permission by a competent, usually governmental, agency to an individual to engage in some practice or activity. Engaging in that practice or activity is illegal without a license. The state of West Virginia requires clinical laboratory practitioners to be licensed. The West Virginia Division of Health Legislative Rule governing Clinical Laboratory Technicians and Technologists Licensure and Certification (64 CRS 57) became effective August 1, 1997. This rule pertains to laboratory practitioners performing clinical laboratory testing of moderate or high complexity as defined by the Clinical Laboratory Improvement Amendment of 1988 (CLIA-88). Graduates of the MLT Program are eligible to apply for state Licensure but are required to have passed a recognized MLT certification exam prior to licensure (BOC ASCP, AMT, or other). MLT students will be granted trainee license status during their clinical practica experience.

EMPLOYMENT OPPORTUNITIES

Job Market

Medical Laboratory Technicians work in a variety of settings. They are employed by hospitals, physician office laboratories, reference laboratories, pharmaceutical companies, research laboratories, veterinary laboratories, clinics, public health facilities, and business and industry. In their 2023 wage survey, the American Society for Clinical Pathology (ASCP) found that the average annual salary for medical laboratory technicians in the United States ranged from $55,000.

Conducted every two years, the ASCP Vacancy Survey serves as the primary source for industry, labor, government, and academic analysts. According to the U.S. Department of Bureau and Labor Statistics, the job outlook for Medical and Clinical Laboratory Technologists and Technicians for 2022-2032 will be 5% faster than the average projected growth compared to all occupations, indicating the need for more laboratory professionals to fill upcoming vacancies. In 2016, the Bureau of Labor statistics anticipated needed growth of 12,000 new medical laboratory professionals per year to meet growing demand. However, academic programs currently produce just 5,000 graduates per year.

For the years 2021-2023, over 96% of our graduates were either in jobs, continuing their education, or both within six months after graduation.

References

Students or graduates seeking employment may wish to ask MLT Program faculty and/or clinical faculty from the affiliates to provide a reference. Employers, however, often initiate contact with MLT Program faculty for references on students or graduates.

Clinical affiliates often use student performance during their clinical practicum to evaluate and screen prospective employees. Therefore, it is in the student's interest to perform all duties and responsibilities at the clinical affiliates to the best of his/her ability.

TEACH OUT PLAN

If the Medical Laboratory Technology Program at the Advanced Technology Center of Pierpont Community and Technical College would close, any student currently enrolled in program specific courses or in the process of completing the program would be allowed to complete the necessary didactic and clinical courses to finish their degree. New students would not be accepted into the program. The MLT program has prepared the following general plan addressing a temporary or permanent program closure.

- Preparations have been made through the creation of a shared drive which is inclusive of all MLT program course materials.
- The MLT shared drive is accessible remotely by MLT faculty and college administration and will allow continuous operation of program courses at an alternate location.
- In the event of a temporary or permanent program closure, a detailed plan will be submitted to NAACLS within 30 days of the official announcement of closure.
- If there is a catastrophic event and the MLT coursework could not be delivered at the Advanced Technology campus, an attempt would be made to continue courses using technology, providing that infrastructure were operational.

- Laboratory locations would be sought for the student laboratory portion of the curriculum at regional sites such as the Caperton or Braxton. If these campuses are also incapacitated, attempts will be made to accommodate courses at clinical affiliates.
- If a regional catastrophic event occurred, which would interfere with the operation of a clinical affiliate, attempts would be made to place students at other functioning clinical sites for completion of their education.
- If the college cannot provide courses due to the catastrophic event, the MLT program will reach out to other MLT programs in West Virginia for assistance in providing the current MLT students with the opportunity to complete their education.

HEPATITIS B VIRUS AND HIV VIRUS

As a student entering the health care industry, it is essential that you be aware that you have chosen a program that has the potential to bring you in contact with blood borne pathogens such as Hepatitis B virus (HBV) and the Human Immunodeficiency virus (HIV). For this reason, Pierpont Community and Technical College, Center for Disease Control (CDC) and Occupational Safety and Health Administration (OSHA) have developed safety programs to protect you against work-related exposure to blood borne pathogens.

Although you will receive extensive training on how to protect yourself and others against these viruses, as a student in Medical Laboratory Technology, we want to provide you with essential information prior to beginning the program to emphasize the serious nature of your work and your responsibility to follow safety regulations. While it is our responsibility to inform you of these safety procedures, it is your responsibility to realize their importance and follow these safety rules without exception.

Hepatitis B virus, previously called Serum Hepatitis, is the major infectious occupational health hazard in the health care industry. There are thousands of cases of HBV in the United States each year. Of these cases of hepatitis, some will result in death due to hepatitis related cirrhosis, liver cancer, fulminant hepatitis, not to mention thousands of hepatitis related hospitalizations. It has been estimated that 500-600 health care workers whose jobs entail exposure to blood are hospitalized annually with over 200 deaths.

A safe, immunogenic and effective vaccine to prevent Hepatitis B infection is available and recommended for all persons exposed to blood and body fluids during school training and while working in the profession. The vaccine is essential for your protection, and a series of three shots should be completed before starting your clinical practicum courses. If you choose not to obtain this vaccine, a formal statement must be signed stating your refusal of the vaccinations.

There is no vaccine against HIV at this time. However, if a vaccine becomes available while you are enrolled in this program, we will inform you of its availability. Although the risk of obtaining an HIV infection is very small, safety precautions must be followed in the laboratory. CDC and OSHA guidelines regarding the handling of blood and body fluids specimens will be covered in the curriculum.

If you have any questions or concerns, do not hesitate to contact your physician, program director or education coordinator. Otherwise, if you have carefully read the above information and understand its contents, please sign the statement below and turn it in to be filed.

Signature _____

As a student enrolled in the MLT program, I _____(Name) on_____ (Date), understand that a potential exists for exposure to serious disease producing blood borne pathogens. I understand by obtaining the Hepatitis B vaccination series and following established safety procedures that I am acting to protect myself against work-related exposure to Hepatitis B virus and the Human Immunodeficiency virus.

HEPATITIS B VACCINE DECLINATION

I understand that due to my educational exposure to blood or other infectious materials, I may be at risk of acquiring a Hepatitis B viral (HBV) infection. I have been given information concerning the availability of the Hepatitis B surface antigen vaccine and the risk I take by not choosing to be vaccinated. I decline to obtain the vaccine at this time. I understand that by declining to be vaccinated, I continue to be at risk for acquiring Hepatitis B, a serious disease. If in the future I continue to have exposure to blood or other potentially infectious materials and I want to be vaccinated, I can receive information on the availability of the vaccine.

Student name (print) _____

Student signature _____

Date _____

Witness_____

HEALTH INSURANCE INFORMATION

Pierpont Community and Technical College does not provide individual health or accident insurance; therefore, students should be covered by a health insurance before entering the Medical Laboratory Technology (MLT) Program. Students are responsible for any expenses incurred because of illness or accidents including those that might occur in clinical practicum courses at the affiliates. The clinical affiliates of the MLT Program do not provide health or accident insurance for students but will administer emergency treatment if required. Students are required to report all accidents which occur at the college or clinical affiliates. Treatment will be given based on college or clinical affiliate guidelines. Students and/or their family are responsible for all costs incurred. All students in the MLT Program will have placed in their student file an incident report form concerning any accidents which may occur.

It is the student's responsibility to obtain health insurance if he or she is not covered.

I have read and understand the MLT Program policy concerning accidents and health insurance.

Student Name _____

Student Signature _____

Health Insurance Provider _____

Policy Number _____

Witness _____

****Each student assigned to a clinical practicum is responsible for maintaining adequate health insurance coverage and will provide the Clinical Education Coordinator with evidence of such coverage at least thirty (30) days prior to the beginning of the student(s)' clinical field experience. Failure to maintain adequate health insurance may subject the assigned student to immediate dismissal from the clinical affiliate and repeated failures by one or more students to maintain adequate health insurance is grounds for immediate termination of Clinical Education Agreements with the college.***

FILE EXAMINATION FORM

____ I waive my rights and permit my file to be examined for the purpose of Program Accreditation.

____ I do not waive my rights and request that the information in my file be confidential.

Signature _____

Date _____

Witness _____

RELEASE FORM FOR VENIPUNCTURE AND FINGER PUNCTURE TECHNIQUES

As part of the required training for the Medical Laboratory Technology (MLT) Program, I understand that venipuncture and finger puncture techniques will be performed on students by students or the MLT faculty. This training is done only under the direct supervision of the faculty of the Medical Laboratory Technology Program.

In participating in this training experience, I release Pierpont Community and Technical College and the MLT faculty from any liability, injury or illness of any kind that could arise from this learning experience.

Signature _____

Witness _____

Date _____

RELEASE OF PHOTOGRAPHIC PICTURES

Medical Laboratory Technology student's photographs are occasionally used for MLT and Health Science program brochures and for Pierpont Community and Technical College Internet information concerning the MLT and Health Science programs. Please sign the form below indicating the use of any pictures in which you have been photographed.

Student name, please print _____

I **will** allow the Medical Laboratory Technology Program and Pierpont Community and Technical College to release any photographs in which I appear for use in program brochures or for use on the Internet.

_____
Student signature Date _____

_____
Program Official signature Date _____

I **will not** allow the Medical Laboratory Technology Program and Pierpont Community and Technical College to release any photographs in which I appear for use in program brochures or for use on the Internet.

_____
Student signature Date _____

_____
Program Official signature Date _____

ESSENTIAL FUNCTIONS ANNUAL UPDATE SIGNATURE FORM

In order to participate in a medical laboratory science educational program, qualified individuals must be able to perform the program's designated essential functions with or without reasonable accommodations. Essential functions for acceptance into the MLT program and clinical practica experiences are included below:

Essential Observational Requirements for the Clinical Laboratory Sciences

- Visual acuity to perform macroscopic and microscopic analyses and to read procedures, graphs, charts, etc.
- Ability to visually differentiate colors

Essential Movement Requirements for the Clinical Laboratory Sciences

- Good motor skills, eye-hand coordination, and dexterity
- Ability to transport self to numerous laboratory sites for practical experience.
- Perform moderately taxing continuous physical work, which includes prolonged sitting or standing over several hours, and frequent lifting and/or carrying of objects weighing up to 10lbs with a maximum of 25lbs.
- Maneuver phlebotomy and culture acquisition equipment to safely collect valid laboratory specimens from patients which requires coordination of both gross and fine muscular movement, equilibrium, and functional use of the senses of touch and vision.

Essential Intellectual Requirements for the Clinical Laboratory Sciences

- Comprehend, measure, analyze and synthesize various materials
- Be able to exercise sufficient judgment to recognize and correct performance deviations

Essential Communication Requirements for the Clinical Laboratory Sciences

- Communication skills adequate for transmitting to and receiving information from patients and hospital personnel
- Ability to understand and follow verbal and written instructions in order to correctly perform laboratory test procedures.

Essential Professional Skill Requirements for the Clinical Laboratory Sciences

- Be able to work independently and as part of a healthcare team
- Manage time efficiently
- Behavioral and social skills acceptable to the hospital setting

By signing this form, I acknowledge that I understand and am able to perform all essential functions listed above for the Medical Laboratory Technology Program at Pierpont Community and Technical College and at my clinical affiliate.

_____

Student name (Please Print)

_____ _____

Student signature **Date**

References

Fritsma, G.A., Fiorella, B.J., and Murphy, M., Essential Requirements for Clinical Laboratory Science, Clinical Laboratory Science, Vol. 9, No. 1, Jan/Feb 1996, p. 40-43.

ASCLS, Becoming a Clinical Laboratory Professional, Essential Functions, accessed 9/1/2020 at https://www.ascls.org/careers-ascls/how-do-i-become-a-laboratory-professional

Clinical Requirements

To participate in clinical practicum courses at the clinical affiliates, students must complete numerous requirements to assure general health and safety at the clinical facility.

- Behavioral and social skills acceptable to the hospital setting
- Good general health as evaluated by a physician during a physical examination
- Appropriate vaccinations for: a current tetanus toxoid, MMR, varicella, and Hepatitis B vaccine series; **and** rubella, measles, mumps, varicella, and hepatitis surface antibody test demonstrating sufficient antibody titer to indicate immunity. The titers may be submitted in lieu of the Hepatitis B vaccine series
- Seasonal influenza immunization
- **Other Immunizations as required by clinical affiliate**
- A drug screen which is negative for drugs of abuse, alcohol, and non-prescribed medications
- A current CPR card – BLS American Heart Association course
- PPD testing or results of an IGRA
- Background check – clear of felony and class I misdemeanors
- Health insurance
- Ability to transport self to numerous laboratory sites for practical experience

The clinical requirements must be completed in the time frame outlined by the clinical education coordinator during MLT student orientation and through later correspondence. All MLT students are required to be vaccinated for Hepatitis B prior to contact with human blood or other potentially infectious materials *(prior to second semester of program)*. Students refusing the vaccination must sign a copy of the Hepatitis B Vaccination Declination form. The form will be placed into the student file.

All clinical requirements must be completed prior to admittance to the clinical affiliate. Late or missing clinical requirements will result in a delay of the student's clinical practicum and can result in failure or loss of clinical placement.

By signing this form, I acknowledge that I understand and am meet the health and safety requirements for the Medical Laboratory Technology Program at Pierpont Community and Technical College and at my clinical affiliate.

_____

Student name (Please Print)

_____ _____

Student signature **Date**

CONFIDENTIALITY

As a student in the Medical Laboratory Technology Program, I recognize that I am governed by the CONFIDENTIALITY rules of the clinical laboratory field.

In this area I will neither seek to learn nor disseminate information regarding **any** patient in a health care facility. Test results will remain confidential and the confidentiality will not be violated. I further understand that I will neither seek to learn nor disseminate information regarding **any** student in a student clinical laboratory. Results and student information will remain confidential and the confidentiality of a fellow student will not be violated.

I understand that if I so violate this confidentiality in any manner, I will incur immediate dismissal from the Medical Laboratory Technology Program at Pierpont Community and Technical College. I also understand that the reason for my dismissal will become part of the student record maintained by the program.

Signature _____

Date _____

MEDICAL LABORATORY TECHNOLOGY
CLINICAL AFFILIATE PLACEMENT POLICY

The number of students annually comprising the cohort of the Pierpont CTC Medical Laboratory Technology (MLT) program is contingent on the number of spaces available for student training at the clinical affiliates. Students are not assigned and do not attend clinical affiliate training (MLAB 2221-2224) until one and ¼ years after their time of entering into the program cohort. Due to language in the affiliation agreements, staffing patterns and internal issues that may occur at the clinical affiliates the number of spaces available for allowing sufficient MLT student training may change during this time interval.

- Students who are ready to begin clinical training will sign a form indicating that they are aware that the student must meet attendance requirements, and cost requirements (travel, food, uniforms, etc.), and remain in good standing while in attendance at the clinical affiliates.

- Annually, during the summer before clinical training is to begin the students ready for clinical training will submit to the MLT Clinical Education Coordinator a list of choices for clinical placement location in a ranked order.

- The MLT Clinical Education Coordinator will review the choices and assign the students to one of their top three choices if possible based on current clinical space available. The basis for assigning clinical placements is (1) seniority status (2) MLT program GPA, highest to lowest and (3) the discretion of the Clinical Education Coordinator.

- If the number of placement sites is not adequate to meet the clinical training needs for all students in good academic standing in the MLT program at the time of placement, students who are not assigned a placement will be given seniority selection for the following summer or fall.

- Any student given a placement site who declines attending an assigned site for training will not be allowed to attend clinical training and will be re-assigned to a site the next summer or fall using the process stated above.

I have read the *Medical Laboratory Technology Clinical Affiliate Placement Policy*, have been given an opportunity to ask questions and will abide by this policy and the outcome of this policy.

_____ _____

MLT Student (printed name and signature) **Date**

SAFETY PROCEDURES RELATING TO BLOOD BORNE PATHOGENS

These procedures have been developed based on current universal precautions and medical information concerning blood borne pathogens. All students will be responsible for following appropriate safety procedures in the student laboratory sessions and the clinical affiliates.

1. The MLT program requires that all students accepted into the program or accepted on the alternates list obtain adequate health insurance. Students are responsible for any medical fees incurred from laboratory accidents which occur on campus or at the affiliate.

2. All MLT students are required to be vaccinated for Hepatitis B **prior** to contact with human blood or other potentially infectious materials (*prior to second semester of program*). Students refusing the vaccination must sign a copy of the Hepatitis B Vaccination Declination form. The form will be placed into the student file.

3. Students will be provided with safety supplies including a table shield, face shields, latex gloves and pipet bulb. Students must purchase and provide laboratory coats. Costs and documentation for Hepatitis B Vaccinations, Hepatitis B antibody titer (6 months after the last shot), and adequate health insurance is also the responsibility of the student.

4. The College provides professional liability insurance to MLT students while enrolled in the MLT program. This coverage does not include afterhours work for pay.

5. Sharp items such as needles, scalpels, and blades are considered potentially dangerous and should be handled with extreme

6. Disposable syringes, needles, microscope slides, scalpel blades, broken glass and other sharp items must be placed in a sharps container for disposal. Needles must not be recapped, purposely broken, removed from a syringe, or removed by hand. All biohazardous material must be placed in red biohazard bags for disposal.

7. Standard precautions must be always followed when working with blood or any other body fluid or potentially infectious material. Latex gloves and lab coats must also be worn. A face or safety shield must be used when working with samples at the bench area or that are being centrifuged.

8. Shoes must be of leather, vinyl, or nonporous material and must be closed toed/heeled. Sandals are not permitted in the student laboratory or clinical affiliates.

SAFETY PROCEDURES RELATING TO BLOOD BORNE PATHOGENS (cont.)

9. Hands should be washed thoroughly and immediately if contaminated with a potentially infectious material.

10. Any occupational exposure to blood or body fluids should be reported to the Program Director, Clinical Education Coordinator, and Clinical Coordinator at the appropriate clinical affiliate. An incident report regarding the exposure, treatment, and follow up procedures will be kept in the student file.

11. Students with occupational exposures during student laboratory sessions will report to and follow the guidelines of the ATC Safety Officer and with occupational exposures during the clinical practicum will report to and follow the guidelines of the clinical affiliate.

12. The student's physician in conjunction with the Pierpont Community and Technical College officials and the MLT faculty will determine on an individual basis whether the student can safely perform duties associated with patients or patient samples. For example, an infected student who cannot control body secretions and students with uncoverable oozing lesions may not be allowed to participate in the MLT program.

I have read and understand the above policies.

Student's Signature Date

RELEASE OF INFORMATION

I, _____, do hereby grant permission to the
Student Name

Medical Laboratory Technology Program of Pierpont Community and Technical College, to release information regarding my physical examination, background check, drug screens and immunizations to my assigned clinical affiliate for clinical practicum courses.

This information will be utilized by the clinical affiliate to certify that all health requirements are met.

WITNESS_____ **DATE**_____

STUDENT_____ **DATE**_____

PART-TIME MLT STUDENT FORM

The definition of a part-time student is any student who is enrolled and accepted into a specific MLT class year but chooses not to complete the program in the necessary 22 months and does not graduate with that class. This definition does not hold for students who reapply to the program and are accepted into a new class year. Rules and regulations for part-time students include:

1. Part-time students cannot register for any Clinical Practicum course (MLAB 2221, 2222, 2223 or 2224) until they have successfully completed all MLT course requirements, excluding MLAB 2225 and 2226.

2. Part-time students must be willing to attend MLAB 2221, 2222, 2223 and 2224 on a consecutive Monday through Friday basis, for eight hours a day.

3. Part-time students are worked into the Practicum assignments (MLAB 2221, 2222, 2223 and 2224) on a space available process. There is no guarantee for immediate placement once the required program courses are completed. All accepted full-time MLT students are given priority into clinical assignments.

4. Part-time students are prioritized for clinical placement based on their start date in the program. Part-time students are ranked according to GPA. If more than one part-time student has the same start date, is ready to begin clinical assignments, and space is available, the student with the higher GPA will be placed first.

I have been accepted into the MLT program and would like to be considered s a "part-time" MLT student. I have read and understand the above part-time students' rules and I am willing to abide by them.

_____
Student name (print)

_____ _____
Student Signature Date

_____ _____
MLT Program Official Date

Additional notes:

Accepted with the class of _____

Date ready to begin Practicum work_____

Program GPA_____

PIERPONT COMMUNITY & TECHNICAL COLLEGE
MEDICAL LABORATORY TECHNOLOGY PROGRAM
HEALTH AND SAFETY POLICY

Policy:

Maintenance of personal health is the responsibility of every student enrolled in the School of Health Careers for the protection of the student, their patients and Pierpont Community & Technical College. Students must have the mental and physical ability to meet course outcomes and to render care with reasonable skill and safety to patients and self. Although every effort is made to accommodate students with medical issues, accommodation may not be possible in every situation.

Procedures:

1. It is the student's responsibility to advise faculty of any major status change in their health (physical, emotional, mental), medication, or condition that may interfere with the ability to participate in academic and clinical assignments.

2. The student may be/will be required to provide a Medical Release Form signed by a qualified healthcare provider to certify that the challenges of classroom and clinical laboratory experience will not negatively affect the student's health or the safety of patients.

3. The healthcare provider may be/will be required to certify that the student is able to perform specific, specialized duties expected of a student in a respective program in addition to the general expectations listed on the Medical Release Form.

4. In the event of extended interruption of classroom or clinical activities due to hospitalization or health related circumstances the student will be required to provide an updated Medical Release Form (Appendix A) signed by a qualified healthcare provider.

5. The updated Medical Release Form must be received before the student may resume participation in classroom and/or clinical activities.

6. Absences related to any illness (physical, emotional, mental) or condition will follow the attendance policy for classroom and or clinical laboratory experience applicable to the student's health career program enrollment.

7. If certification of the ability to participate in a health career program is not provided by the student as required by this policy and procedure, participation in the health career program will be delayed.

Pierpont Community & Technical College
School of Health Sciences
Medical Release Form

_____

Date:_____

(Student Name)_____ has been under my care and is able to participate without restrictions and can provide direct patient care safely with regard to themselves and to their patients in the clinical setting as a student in the School of Health Sciences at Pierpont Community & Technical College.

_____

Healthcare Provider's printed name

_____

Healthcare Provider's Signature

Remediation Plan for Students

MLT faculty and the MLT Program Director recognize the need to identify issues early that may prevent a student from successfully completing the program. These issues can be behavioral, academic or a change in health status which require a systematic plan to assist students in developing learning strategies and skills for success. We ask that students be an *active* partner in the development and implementation of the plan. The student will meet with the instructor to develop the plan and the following forms may be used to document the remediation process:

Expectations Regarding Classroom/Lab Behavior

Date _____ **Class** _____

Student _____ **ID** _____

Expectations regarding classroom behavior have been explained in the Pierpont Technical & Community College MLT Program handbook and in the course syllabus.

Your behavior in this class has been considered disruptive to the educational process for the following reasons:

	Unapproved use of cell phone, tablet, or laptop (ex: texting, checking email, using social media, browsing the internet)
	Unprofessional behavior towards classmates or instructor
	Use of profanity
	Excessive tardiness or early departure
	Disruptive talking
	Other:

Your disruptive behavior is distracting for other students who are trying to concentrate on learning. If this behavior continues, additional disciplinary action may be taken according to policy. Your signature indicates a written commitment to work on these areas.

Goals for improvement:

Student comments:

_____ _____

Student Signature/ Date Instructor Signature/Date

Expectations Regarding Academic Performance

Date _____ **Class** _____

Student _____ **ID** _____

Expectations regarding academic performance have been explained in the Pierpont Technical & Community College MLT Program handbook and in the course syllabus. This meeting is to discuss a plan to successfully complete the course listed above.

	UNACCEPTABLE PERFORMANCE		**GOALS FOR IMPROVEMENT**
	Poor attendance		
		Absences	
		Tardiness/Early Departure	
	< 75% Lecture average		
		Missing/low assignment average	
		Low exam average	
	< 75% Lab average		
		Missing labs	
		Low lab average	
	Other:		

Please add any additional comments or suggestions below. Your signature indicates a written commitment to work on these areas.

Student comments:

_____ _____

Student Signature/ Date Instructor Signature/Date

STUDENT EXIT INTERVIEW FORM

Students considering withdrawing from the Medical Laboratory Technology Program for any reason or period, should schedule an exit interview with the MLT Program Director to discuss appropriate procedures prior to leaving. A decision on readmission will be made based on the availability of space in the cohort formed in the second semester of the program. All requirements must be met for readmission. The student will need to follow the course catalog and MLT Student Handbook policies of the year they are readmitted. Students who must withdraw from the program due to unsatisfactory academic performance are generally only readmitted once.

Students who (voluntarily or involuntarily) withdraw from the program AND seek readmission AND three-or-more years has lapsed since the successful completion of any MLAB courses, will be required to retake the MLAB courses of the current MLT curriculum. Standards of practice change; students are expected to be up to date on current standards of practice. Additionally, when students are readmitted, they are expected to fulfill/update the student clinical requirements.

It is the responsibility of the student to follow the official college policy for withdrawal. This is especially important for any student who may decide to reapply to the Medical Laboratory Technology Program or return to the college in the future.

Date of exit interview with Program Director: _____

Reason for withdrawing from the program: _____

_____

_____

Would you like to return to the program in the future? _____

_____
Student Name (print)

_____
Student Signature Date

_____
Program Director Signature Date

STUDENT HANDBOOK READ IT/SIGNATURE FORM

This form and all forms in the *MLT Student Handbook* must be signed by the student and returned to the MLT Clinical Education Coordinator before the end of the first semester of study.

Please read the statement below carefully before signing this page:

I, as a responsible student in the Pierpont Community and Technical College Medical Laboratory Technology Program, have read, understand, accept and take full responsibility for the policies, information and professional rules of conduct identified in the *MLT Student Handbook*. I have been given an opportunity to ask questions concerning all information in the handbook.

Student name (print) _____

Student signature _____

Date signed _____

Witness signature _____

DISCLAIMER

The contents of this handbook are accurate at the time of printing but may be modified or changed at any time to correspond with decisions of the Pierpont Community and Technical College Board of Governors or Administration, Local, State or Federal Requirements. The students should be aware that modifications in policy and procedure might occur without advance notice. The School of Health Sciences, the Medical Laboratory Technology Program and its Advisory Board reserve the right to assess and modify the educational policies and program requirements as new information is available and as student or curricular needs are identified. The student will be notified in writing of any changes that may impact his/her course of study.

EQUAL OPPORTUNITY AND NON-DISCRIMINATION STATEMENT

Pierpont Community and Technical College is an Equal Opportunity/Affirmative Action Institution and does not discriminate based on race, sex, gender identity, pregnancy, sexual orientation, age, disability, veteran status, religion, color, or age in admission, employment, or educational programs and activities; nor does it discriminate based on genetic information in employment or employee health benefits. Faculty, staff, students, and applicants are protected from retaliation for making complaints or assisting in investigations of discrimination.

INDEX

Page