

Health Professions Medical Laboratory Technology Program Information Packet

www.mccc.edu/mltp



Welcome Prospective Student,

Thank you for your interest in the Mercer County Community College (MCCC) Medical Laboratory Technology (MLT) Program. The field of medical laboratory science is an exciting profession! This program at Mercer is accredited by the National Accrediting Agency for Clinical Laboratory Science (NAACLS) and includes preparation in general education courses (Pre-professional phase) with a focus in the sciences. The second year (Professional Phase) is accelerated and consists of five, core MLT courses and ends with a clinical practice internship where students gain hands-on experience at an affiliated clinical hospital site.

Any person is eligible to begin coursework at Mercer County Community College toward qualifying for admission to the MLT Program and A.A.S. degree; however, admission into the second year (MLT Professional Phase) requires interested students to submit a separate application form during an open petition period during the month of February of each year. All prospective students must also be able to perform the required MLT Essential Functions, consistent with the NAACLS accrediting agency standards.

Upon graduation, our students are prepared to take the American Society of Clinical Pathology Board of Certification Medical Laboratory Technician exam (BOC-MLT). In addition, the MLT program has established 1+1 articulation agreements with other community colleges and a 3+1 Bachelor of Science degree option with four-year colleges for students looking to continue with their studies.

This packet will introduce you to the profession, the MCCC MLT program, the curriculum, and the application process of the college and the Professional Phase of the program. If you have any further questions, please feel free to contact me, or schedule an appointment to meet with me by calling (609) 570-3387 or emailing shave@mccc.edu. I look forward to meeting with you as you begin your journey toward your professional medical laboratory science career.

Sincerely,

Lisa M Shave M.S., MLS(ASCP)^{CM}SBB^{CM} Medical Laboratory Technology Program Coordinator and Associate Professor <u>shavel@mccc.edu</u> 609-570-3387

INFORMATION IN THIS PACKET SUPERCEDES ALL PREVIOUSLY PUBLISHED INFORMATION Changes in the curriculum and admission requirements for the MLT Program may occur between the time the applicant applies to the College and the time of acceptance into the MLT Program. Students should check periodically to see if materials have been updated. Applicants must meet the requirements in place for the MLT Program at the time that acceptance into the Program is offered.

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MLT Career Information

The Medical Laboratory Technology Program is designed to prepare students for successful careers as Medical Laboratory Technicians (MLTs).

Medical Laboratory Technicians (MLT) are vital to the healthcare team as they are often the first to produce patient results. MLT's use sophisticated biomedical instrumentation, as well as manual procedures, to perform testing and provide results that are essential in the diagnosis, treatment and prevention of disease. It is estimated that over 70% of all medical decisions are based in part on laboratory results.

The MLT Program at Mercer County Community College offers a diverse and multi-level education in the areas of collecting, processing, and analyzing biological specimens and other substances. Principles and methodologies are discussed, assays are performed and problem solving and troubleshooting techniques are incorporated into the curriculum to assist students in correlating clinical procedures and patient test results. In addition, the importance and value of quality assessment for all major areas (Phlebotomy, Immunology, Urinalysis, Clinical Chemistry, Clinical Hematology, Immunohematology, Microbiology, and Molecular biology) are practiced in the contemporary clinical laboratory (see individual MLT course descriptions in the MCCC Catalog for information regarding each department).

Employment Demand

There are excellent employment opportunities for MLTs in hospitals, reference laboratories, regional blood centers, public health labs and physician offices. According to the U.S. Bureau of Labor and Statistics, "Employment of medical laboratory technicians is projected to grow 18 percent from 2014 to 2024, much faster than the average for all occupations.

MLT Program Accreditation

MCCC's Medical Laboratory Technology Program is accredited by: NAACLS, the National Accrediting Agency for Clinical Laboratory Sciences 5600 N. River Rd. Suite 720, Rosemont, IL 60018-5119. Phone (773) 714-8880 http://www.naacls.org

MLT Program Description

Program Length: The Mercer County Community College Associate of Applied Science in Medical Laboratory Technology is 14 months in length and consists of 63/64 credit hours. This curriculum is designed to prepare students for employment as medical laboratory technicians upon graduation and certification.

Mercer's MLT program is offered in phases: Pre-Professional (Year 1) & Professional (Year 2) <u>Pre-Professional Phase (Academic Year 1)</u>

Students who have received a high school diploma or GED (General Educational Development) certificate and have met basic skill requirements in reading, writing and math will be eligible for the MLT major at MCCC. The program's pre-professional phase includes foundational courses in English, Mathematics, Science, Health and General Education. MLT students may enroll in required courses at MCCC or other regionally accredited colleges or universities. Equivalent course credits from other educational institutions may be transferred to Mercer with transcript evaluation. CLEP (College Level Examination Program) tests may be taken to demonstrate mastery of a course's subject matter that has been taken over 10 years ago. An Experiential Credit form may also be completed and submitted for evaluation to see if a student can qualify to earn credit for courses through prior learning experiences such as work experience. A course requirement may also be waived at the discretion of the MLT Program Coordinator and College Administrators.

Important Information about the Pre-Professional Phase:

- 1. A minimum grade of C or above (C+ or better for core sciences and math) needs be earned in prerequisite courses within 2 attempts in order to count toward program requirements.
- Transfer students can earn credit by having their official transcripts from other institutions sent to the Registrar's office. (*For more info, review page 9*)
 -10-year expiration for general education courses (Eng, Chem, Math, etc.)
 -5-year expiration for science courses (A&P I/II and General Microbiology)
- **3.** A minimum GPA of 2.5 must be earned while in the Pre-Professional phase to be eligible to enter the Professional Phase of the program.
- **4.** Students need to be near completion of all MLT Pre-Professional requirements before petitioning for admission into the professional phase.
- **5.** Petitions are accepted every February for a May start-date and the application is posted on the MLT website (<u>www.mccc.edu/mltp</u>) on the last day of January.

Professional Phase (Year 2)

Every year, the Professional Phase of the program begins in May for those applicants who have been granted acceptance after the February petition period. It starts with the 'Introduction to Medical Laboratory Technology' course and then progresses to 200 level courses focusing on each laboratory disciplines (Clinical Hematology, Immunohematology, Microbiology and Chemistry). The program's Clinical Laboratory Practicum is offered at the end of the professional phase. Students are assigned to 640 hours of clinical experience over 4 months at one of Mercer's clinical affiliate hospital sites. S i x rotations (one in each lab department plus Phlebotomy and Urinalysis) are completed in 16 weeks, Monday through Friday, 5 days a week for 8 hours a day. The clinical experience offers competency based

instruction under the supervision of laboratory professionals. Students are evaluated in each of the 6 departments on their professionalism, technical skills and their application of laboratory testing principles to daily bench work. The practicum experience is coordinated by Mercer's MLT faculty in collaboration with contractual agreements from affiliate hospitals. Clinical rotations usually begin in March and continue through July. MCCC makes every effort to assure that all students in the professional phase of the program have a spot at a clinical site for the required Clinical Practicum. In the event that there are not enough spaces, students will be chosen first based on the highest MLT Professional Phase GPA.

Other Information about the Professional Phase:

- 1. Prospective students are hereby notified that certain medical facilities require both criminal/sex offender background checks as well as drug screens prior to being authorized to attend clinical practicum. The cost of the background check and urine drug screen is the responsibility of the student. (See below for more information)
- 2. Students need to maintain a grade of C+ or above in all professional phase courses. If a C+ or above is not earned in a professional phase course more than once, then the student will be ineligible to continue in the program.
- **3.** A student will only be considered for readmission to the program upon written request to the Program Director. Readmission will only be granted on a space available basis. Priority is given to the new/incoming applicants.
- **4.** A student does not need to retake successfully passed courses unless the professional phase cannot be completed within a 2 year period. Then, students must start from the beginning of the program's course sequence.

There are two Professional Phase pathways available for students:

On-campus program

The professional phase of the MLT program runs for 14 consecutive months and is extremely accelerated. Each semester, students spend 2 or 3 days a week on the West Windsor campus attending lectures and laboratory sessions. There are two 7-week summer courses, two 7-week fall courses, one 7-week spring course and then a 16-week Clinical Practice course that begins the second half of the spring semester and continues through the summer. Lecture and Lab are both taught on days students are on campus and the hours range from 8am-5pm.

Hybrid (Web-blended) program

The MLT program offers a web-blended online curriculum to suit the needs of students who wish to enroll in the MLT Professional Phase, but live at a distance from the college or who need more flexibility to meet outside obligations (work, family, etc.). All of the required MLT lecture courses are available online. On-campus and web-blended students will be learning synchronously. The schedule is the same for both programs except that web-blended students don't report to campus for face-to-face lecture time. Web-blended students DO have to report for student lab sessions which are offered one day a week throughout the semester for about 6 hours. Midterms/Finals must be taken at an approved Testing Center (this may be additional costs). Web-blended students will also complete their final Clinical Practice internship course at an approved clinical affiliate site for the same amount of time as on-campus students.

MLT Curriculum (A.A.S. Degree Requirements)

CODE	COURSE (Lecture/Lab Hours)	CREDITS		
PRE-PROFESSIONAL PHASE REQUIREMENTS				
FIRST SEMESTER				
ENG 101	English Composition I (3/0)	3		
BIO 103	Anatomy & Physiology I (3/3) ¹	4		
MATH	Mathematics Elective (3/0) ²	4		
PSY 101	Intro to Psych (3/0) ³	3		
CSW100	College Success & Wellness (2/0) ⁺	2		
	Total Semester Credits	16		
SECOND SEMESTER				
ENG 102	English Composition II (3/0)	3		
BIO 104	Anatomy & Physiology I(3/3) ¹	4		
CHEM 101/107	General Chemistry I	4		
	or General and Physiological Chemistry (3/2)			
BIO 201	Microbiology (3/3)	4		
CMN111/112	Speech: Human Communication (3/0)	2		
	or Public Speaking (3/0) ⁴	or 3		
	Total Semester Credits	16/17		
	Total	32/33		
FEBRUARY PETITION PERIOD				
PROFESSIONAL PHASE REQUIREMENTS: (14 months)				
MLT 112	Introduction to Medical Laboratory	3		
	Technology (2/3)			
MLT 212	Clinical Hematology (3/3)	4		
MLT 207	Clinical Immunohematology (3/3)	4		
MLT 214	Clinical Microbiology (5/3)	6		
MLT 200	Clinical Chemistry (3/2)	4		
MLT 215	Clinical Practice (0/640 hours)	10		
	16 Weeks at an affiliate hospital (March-July)			
	Total	31		
	A.A.S. Degree Total	63/64		

1. BIO 101-102 may be substituted for BIO 103-104 if a student has earned a Bachelor of Science Degree. Consult with the academic advisor for details.

2. Select from: MAT 135, 140, 146, or 200.

3. PSY 101 is the preferred Social Science elective. Consult with academic advisor for details.

4. CMN111 or CMN112 is the preferred General Education Elective. Consult with academic advisor for details.

+ **CSW is preferred**; HPE 110/111(MCCC),ALHT110 (ACCC), HED 150 (MCC)are acceptable also. NOTE: Students must earn a minimum grade of a C+ in the BIO & MAT courses & a C in GenEd courses within two attempts. A grade of C+ is required in all MLT Professional courses within two attempts.

Articulation/Transfer Agreements

There are currently two Articulation Agreements available for students:

1+1 Articulation Agreements

Currently, the MLT Program at MCCC has partnered with other NJ Community colleges to provide access to students who desire to pursue this major. Students can complete the entire Pre-Professional Phase (Year 1) by taking equivalent courses at these institutions. Then, students can apply during the petition period to enter the MLT Professional Phase (Year 2) in the month of February. We advise students to speak to an advisor at these partnering colleges to ensure that they are following the correct curriculum. For the most recent version, please visit the MLT Website or email the MLT Program Coordinator.

- Atlantic Cape Community College
- Middlesex County College

For students who are looking to do this with other colleges with whom we do not have a signed Memorandum of Understanding with, please see the course equivalency chart located on the MLT Website and the section on page 9 for "Transferring credits to MCCC".

3+1 Articulation Agreements

3+1 Articulation agreements are formal agreements between Mercer and other colleges and universities that allow students to pursue higher degrees such as Bachelor's, Master's or a combination of the two. Unlike a traditional 2+2 Articulation Agreement, these agreements ensure that, if you successfully follow a prescribed program of study at Mercer, you will be able to transfer with full Senior status rather than Junior status. We currently have an agreement with Rider University and the details of the exact course equivalencies can be found on the MLT website. Interested students are encouraged to speak with a Rider University transfer advisor as well as the MLT Program Coordinator as soon as possible because there are additional course requirements that differ from the standard MLT Program.

 Rider University link: <u>https://www.rider</u>.edu/admissions/transfer/transfer-yourcredits/community-college-agreements/mercer-county-community-college/medicallaboratory-technology-transfer-advising-guide

For more information, students can visit MCCC's Transfer Services webpage: http://www.mccc.edu/student_services_transfer_out.shtml

Application Procedure Checklist for General College Admission

Steps for applying to MCCC:

- **1.** Complete requirements for high school diploma or GED certificate
- 2. Complete the MCCC online application: http://www.mccc.edu/admissions_application.shtml

- **3.** Declare major as 'Health Science-MLT'
- **4.** Take placement tests for English and mathematics courses if required(see the above website for exemptions)
- **5.** An ESL (English as a Second Language) placement test is required for students who have a primary language other than English.
- **6.** Students who did not complete a year of high school biology and/or chemistry will be recommended to take Mercer's BIO 113: Biological Science Concepts and/or CHE 100: Introductory Chemistry courses. Although it is recommended, both courses are not covered by financial aid. Equivalent courses may be taken at other regionally accredited colleges and universities
- 7. Send all college transcripts to MCCC's Student Records Office (see next section)
- 8. Review the Student Handbook: <u>http://www.mccc.edu/pdf/handbook.pdf</u>
- **9.** Meet with Cindy Matyas, M.Ed., Health Professions Coordinator. Contact her at (609) 570-3596, office MS146 or via email at <u>matyasc@mccc.edu</u>.

Transfer of Courses/Credits

Any course- College policy states that transfer credits will be awarded for any equivalent course taken within the past 10 years with a grade of "C" or higher from a regionally accredited educational institution. However, all Health Profession programs have more specific requirements.

Transferring credits for the Medical Laboratory Technology Program

- **Pre-Professional Phase**-Prospective students may earn credit for the prerequisite courses if the course was successfully completed within 2 attempts with a "C" or better ("C+" or better for all Bio and Math courses (according to MLT prerequisite course expirations).
- **Professional Courses** Equivalent professional phase courses must have been completed within the past 5 years with a grade of C+ or higher from a NAACLS approved program.

Visit the following MCCC Transfer site: <u>http://www.mccc.edu/admissions_transfer.shtml</u> Submit official college transcripts to:

MCCC Student Records PO Box 17202 Trenton, NJ 08690

Transcripts from a foreign educational institution need to be evaluated by an approved agency. Please see the following link for special instructions for international students: http://www.mccc.edu/admissions_international_transfer-credits.shtml

Admission Requirements for the Professional Phase (Year 2)

Admission to Mercer County Community College does not automatically qualify a student for admission to the Medical Laboratory Technology Program. In addition to meeting the admissions requirements for

MCCC and the Division of Health Professions programs, students must complete a separate application. **Students are selected based on a competitive point system that looks at the following:

- A GPA of 2.5 or above (calculated using the required prerequisite course ONLY)
- Completion of prerequisite courses with a grade of "C" or higher for English, Chemistry and elective courses (within the last 10 years) as well as a grade of "C+" or better for core sciences and math (within the last 5 years).
- Be a matriculated MCCC student by applying to the college.

Students who have completed all math and science courses required in the preprofessional phase of the program will be accepted first. Students who are currently finishing up their prerequisite requirements, especially their mathematics and science courses will be considered next. All are welcome to petition.

• If 2 or more students meet the same above listed criteria admission will be to the student with the higher GPA.

For an Example or the Point/Ranking System, please visit the MLT Website

Those admitted to the professional phase will be expected to meet standard academic, technical and behavioral requirements as stated in each of the MLT course's objectives.

• Students who have had previous violations of MCCC's Academic Integrity Policy may NOT be considered for the MLT program.

Additional Requirements for Admitted MLT Students

ESSENTIAL FUNCTIONS

To successfully complete the clinical component of the MLT program, the student must be able to perform all of the essential functions of a Medical Laboratory Technician. Students should possess and be able to demonstrate or meet the requirements as listed on the FAQ page: <u>http://mccc.edu/mltp/faq.shtml</u> An applicant must sign-off that he/she can meet these requirements.

HEALTH REQUIREMENTS

Once accepted, MLT students are required to:

- Schedule a physical examination with required laboratory tests, the Hepatitis B vaccine series and other immunizations prior to the admission into the professional phase of the program. The Physical form must be signed by a licensed healthcare provider.
- **2.** Submit the Mercer 'Health Professions Program Health Form' along with proof of health insurance to the Program Coordinator at the beginning of the professional phase.

CRIMINAL BACKGROUND CHECK/DRUG SCREENING

Mercer's affiliated clinical sites require confidential criminal background checks as well as drug screening on all MLT students. Depending on background check results, clinical sites will determine if a student is eligible for clinical practice. Previous criminal convictions may prohibit eligibility for this phase of the program. Information on how to complete these are given to students at Orientation in April/May.

LIABILITY INSURANCE

All students are required to purchase liability insurance for MLTs.

LAB COATS/UNIFORM

All students must purchase lab coats/uniform from the school's uniform vendor

Tuition, Costs and Program Fees

For current MCCC tuition rates please see: <u>http://www.mccc.edu/admissions_tuition.shtml</u> Additional costs:

- **1.** Foreign transcript evaluation
- 2. Course fees/Textbooks
- **3.** Physical exam/Immunizations
- 4. Health & liability insurance
- 5. Criminal background check/Drug screen
- 6. Uniform for clinical practicum
- 7. Transportation costs to and from assigned clinical site
- **8.** Graduation fee
- **9.** ASCP certification exam (not required but highly recommended)

Clinical Affiliations

AtlantiCare Regional Medical Center: Pomona and Atlantic City, NJ Cape Regional Medical Center: Cape May Court House, NJ Capital Health Hospitals: Trenton and Pennington, NJ CentraState Medical Center: Freehold, NJ Cooper University Hospital: Camden, NJ Hunterdon Medical Center: Flemington, NJ Inspira Medical Center: Elmer, Woodbury and Vineland, NJ JFK Medical Center: Edison, NJ Lourdes Health Center: Willingboro and Camden, NJ The Memorial Hospital of Salem County: Salem, NJ Raritan Bay Medical Center: Perth Amboy, NJ Robert Wood Johnson University Hospital: Hamilton and Rahway, NJ Penn Medicine Princeton Medical Center: Plainsboro, NJ St. Francis Medical Center: Trenton, NJ St. Mary Medical Center: Langhorne, PA Virtua Health System: Mt Holly, Marlton and Voorhees, NJ

Students should be prepared to travel up to the maximum travel distance of 1 hour to reach one of these sites for their clinical internship.

Career and Professional Society Websites

For more information on careers in Medical Laboratory Science please visit the following websites:

www.labscience.org	
www.ascls.org	1
www.aacc.org	1
www.labtestsonline.org	V

www.naacls.org www.nca-info.org www.redcross.org www.aabb.org www.ascp.org www.asm.org www.hematology.org

Support Services for Differing Abilities

Mercer County Community College is committed to ensuring the full participation of all students in its programs. If you have a documented differing ability, or think that you many have differing ability that is protected under the ADA and section 504 of the Rehabilitation Act, please contact Arlene Stinson in LB 216 <u>stinsona@mccc.edu</u> for information regarding support services. If you do not have a documented differing ability, other support services are available to all students on campus including the Learning Center located in LB 214.

Financial Aid Application / Scholarships

Financial Aid

It is recommended that students complete an application for financial aid to determine eligibility for financial assistance. The application is FREE and available online at online at <u>www.fafsa.gov</u>. The federal school code for Mercer is 002641. To ensure that financial aid arrives before tuition and fees are due, applications and supporting documents should be submitted before May 1 for the full academic year or the Fall semester, and before October 1 for the Spring semester only. The FAFSA must be RECEIVED by the Federal processor (not postmarked) by the dates listed on the Mercer website to be considered for the Tuition Aid Grant (TAG), Governor's Urban Scholarship, NJ STARS and NJ STARS II programs.

Please visit: http://www.mccc.edu/admissions_financial.shtml

Scholarships

Students who are interested in MCCC Foundation scholarships are expected to complete an application as well. Scholarships are payments to support a student's education that do not need to be repaid. Through the generosity of our donors and community organizations, Mercer County Community College and the MCCC Foundation award over \$300,000 in scholarship funds annually to current and graduating students. Individuals and businesses in the community establish these scholarships to support a special purpose, honor someone, recognize an achievement, or remember a loved one through a memorial fund.

Please visit: <u>http://www.mccc.edu/foundation_scholarships_available.shtml</u>

Program Coordinator Contact Information Lisa M. Shave M.S., MLS(ASCP)^{CM}SBB^{CM} Medical Laboratory Technology Program Coordinator & Professor Mercer County Community College 1200 Old Trenton Road West Windsor, NJ 08550 Rm 156 Office hours: Varies by Semester (Front-of-door schedule) Or call (609) 570-3387/ (609) 570-3383 Or email: <u>shavel@mccc.edu</u>