Volunteer State Community College Medical Laboratory Technology Program

Information Packet

Dear Prospective MLT Student,

The Medical Laboratory Technology Program is designed to prepare students to enter the work force as generalist Medical Laboratory Technicians (MLT). Students learn the theory and principles behind the tests they perform and learn to correlate the results with patient's conditions. Students also earn general education credits including science, math, humanities and communications which lead to an Associate in Applied Science (A.A.S.) Degree.

I encourage you to further explore this profession and our MLT program here at Volunteer State.

If you would like to schedule an advising session, please contact me at eileen.ricker@volstate.edu.

Sincerely,

Eileen Ricker

Eileen Ricker, MBA, MLS (ASCP) MLT Program Director

Description of the Medical Laboratory Technology Profession

Medical Laboratory Technology (also known as Clinical or Medical Laboratory Science) is a profession which combines the challenges and rewards of both medicine and science. Medical Laboratory Technicians perform a wide range of laboratory tests. Tests include, but are not limited to microscopic examination of blood, identification of bacteria and viruses, typing blood to ensure safe transfusions, and measuring the chemical content of blood. This testing helps to monitor patient health, provides diagnostic evidence of diseases (such as AIDS, diabetes, or cancer), and also aids in patient recovery. Medical laboratory science is a dynamic, specialized profession that continually changes as new medical knowledge is acquired.

The Medical Laboratory Technician scope of practice includes, but is not limited to: collection of blood specimens; performing and interpreting tests on blood and body fluids in order to monitor health and to aid in the diagnosis of disease; integrating data generated by the various clinical laboratory departments while making judgments regarding possible discrepancies; operating the latest biomedical instruments; confirmation of abnormal results; verifying quality control results; developing solutions to problems that may occur during testing; and communication with the entire health care team to help ensure quality patient care. Medical Laboratory Technicians conduct work in a variety of disciplines including immunohematology/blood bank, hematology, clinical chemistry/toxicology, coagulation/hemostasis, molecular diagnostics, urinalysis, and clinical microbiology. Employment opportunities are available in hospital labs, physician office labs, point of care testing, reference laboratories, and clinical research.

Clinical laboratory professionals practice independently and collaboratively, being responsible for their own actions, as defined by the profession. They have the requisite knowledge and skills to educate laboratory professionals, other health care professionals, and others in laboratory practice as well as the public. Therefore, the ability to relate to people, a capacity for reasoned judgement, and a demonstration of commitment to the patient are essential qualities. Communication skills extend to consultative interactions with members of the healthcare team, external relations, customer service, and patient education. Laboratory professionals demonstrate ethical and moral attitudes and principles that are necessary for gaining and maintaining the confidence of patients, professional associates, and the community.

Mission of the Program

It is the mission of the Medical Laboratory Technology Program to provide well trained, professional, knowledgeable and competent Medical Laboratory Technicians to serve the healthcare community and public at large. The program is designed to prepare students to enter the work force as Medical Laboratory Technicians, knowledgeable and skilled in assisting physicians in the identification, monitoring, and treatment of diseases. Successful completion of the program will allow the student to sit for the national certification exam to become a Certified Medical Laboratory Technician (MLT). Certification is available through the American Society of Clinical Pathologists Board of Certification or the American Medical Technologist. In Tennessee, a professional license may then be granted to the medical laboratory professional from the State Medical Laboratory Board.

Program Goals

- 1. The program will educate and train students to perform as knowledgeable and competent medical laboratory technicians.
- 2. Graduates will be able to demonstrate the ability to comprehend, apply, and evaluate clinical information relevant to their role as a Medical Laboratory Technician.
- 3. Graduates will be able to demonstrate entry-level technical competency in all skills necessary to fulfill their role as a Medical Laboratory Technician.
- 4. Graduates will demonstrate personal behaviors consistent with professional and employer expectations of a Medical Laboratory Technician.
- 5. Graduates will render both professional and personal services to the patient, physicians, coworkers, other laboratory professionals, and the community.
- 6. Graduates will possess the necessary knowledge to pass their certification exam and meet the criteria for licensure established by the Tennessee Medical Laboratory Board.

Location of the Program

All MLT courses except the clinical rotations are taught on Volunteer State Community College's main campus in Gallatin, TN. The program director and clinical education coordinator have offices on the main campus in Gallatin. Clinical rotations take place in area hospitals.

Time Course of the Program

The Associate of Applied Science degree in Medical Laboratory Technology is a three-semester full-time program or a four-semester part-time program. The second year is program courses. Students apply for admission to the Medical Laboratory Technology Program while in the semester in which all general education course requirements will be met or after all general education courses requirements are met. The Medical Laboratory Program consists of either a full-time or part-time course of study.

Full-Time Program – The program begins in May each year and students graduate the following May. Students take an average of 12-13 credit hours each semester. It is highly recommended that students work no more than 20 hours per week while in the program. <u>All program applications must be received by March 15th each year</u>. The MLT program application can be located at https://www.volstate.edu/academics/health-sciences/medlabtech/application. Students must submit a minimum of three references forms by April 1st of the year they apply to the program. Professional and/or academic references are preferred. The reference forms can be found within the Medical Laboratory Program Information Packet, which can be found online at

 $\frac{https://www.volstate.edu/sites/default/files/documents/healthsciences/MLTInformationPacket.pd}{\underline{f}}$

After admission into the program, students are considered to be MLT students and will begin the second year. The second year is a three-semester, full time program of study <u>starting in May of</u> each year. The summer and early fall semesters involve didactic courses and student

laboratories. There may be more than one section of each lab course offered. Registrations for lab courses are first come first serve and registration will be honored.

The late fall and spring semesters are spent in clinical practicum rotations along with didactic courses. Clinical practicum rotations consist of 16-32 hours/week at area clinical laboratories. Students are involved in the educational training for a period of twelve months in order to meet requirements of the program and to fulfill requirements of the Associate of Applied Science Degree.

Part-Time Program - The program begins in January each year and students graduate in May of the following year. Students take an average of 9-10 credit hours each semester. It is highly recommended that students work no more than 30 hours per week while in the program. All program applications must be received by October 15th each year. The MLT program application can be located at https://www.volstate.edu/academics/health-sciences/medlabtech/application. Students must submit a minimum of three references forms by November 1st of the year they apply to the program. Professional and/or academic references are preferred. The reference forms can be found within the Medical Laboratory Program Information Packet, which can be found online at https://www.volstate.edu/sites/default/files/documents/healthsciences/MLTInformationPacket.pd f

After admission into the program, students are considered to be MLT students and will begin the second year. The second year is a four-semester, part-time program of study starting in January of each year. The spring and fall semesters involve clinical practicum rotations, didactic courses, and student labs. The summer semester only involves didactic courses and student labs. There may be more than one section of each lab course offered. Registrations for lab courses are first come first serve and registration will be honored.

Clinical rotations consist of 16-22 hours/week at area clinical laboratories. Students are involved in the educational training for a period of 17 months in order to meet requirements of the program and to fulfill requirements of the Associate of Applied Science Degree.

Sample Schedule

Completion of or current enrollment in the following prerequisite courses with a minimum cumulative GPA of 2.2 in those courses and a C or higher in the individual course.

FALL- 1st year	Course	Hrs
ENGL 1010-or higher	English Composition I	3
BIOL 2010	Human Anatomy & Physiology I (Lecture and Lab)	4
MATH 1010-or higher	Math for General Studies	3
PSYC 1030-or higher	Introduction to Psychology	3
MLAB Elective	*See college catalog for options College Catalog	3
	Total	16

SPRING- 1st year	Course	Hrs
Humanities and/or Fine Arts	*See college catalog for options College Catalog	3
BIOL 2020	Human Anatomy & Physiology II (Lecture and Lab)	4
Natural Science Elective: Choose one	BIOL 2230-Microbiology (Lecture and Lab) and/or CHEM 1030-Fundamentals of Chemistry (Lecture and Lab), or a higher-level Chemistry	4
MLAB 1301	Intro to Medical Laboratory Technology (PLA substitution may be awarded*) MLAB 1301	3
	Total	14

Courses after acceptance into the Full-Time MLT Program:

SUMMER- 2 nd	Course	Hrs
year		
MLAB 2401	Clinical Chemistry	4
MLAB 2402	Hematology/Hemostasis	4
MLAB 2403	Clinical Microbiology	4
	Total	12

FALL- 2 nd year	Course	Hrs
MLAB 2202	Urinalysis and Body Fluids	2
MLAB 2201	Clinical Immunology	2
MLAB 2301	Immunohematology/ Blood Bank	3
MLAB 2130	Seminar I	1
MLAB 1510	Clinical Practicum I	5
	Total	13

SPRING- 2 nd year	Course		Hrs
MLAB 2270	Seminar II		2
MLAB 1520	Clinical Practicum II		5
MLAB 2510	Clinical Practicum III		5
		Total	12
		Program Total	67

Courses after acceptance into the Part-Time MLT Program:

SPRING- 2 nd year	Course	Hrs
MLAB 2401	Clinical Chemistry	4
MLAB 2402	Hematology/Hemostasis	4
MLAB 2130	Seminar I	1
	Total	9

SUMMER- 2 nd year	Course	Hrs
MLAB 2403	Clinical Microbiology	4
MLAB 1510	Clinical Practicum	5

		Total	9
FALL- 2 nd year	Course		Hrs
MLAB 2202	Urinalysis and Body Fluids		2
MLAB 2301	Immunohematology/ Blood Bank		3
MLAB 1510	Clinical Practicum II		5
		Total	10

SPRING- 3 rd year	Course	Hrs
MLAB 2201	Clinical Immunology	2
MLAB 1510	Clinical Practicum III	5
MLAB 2270	Seminar II	2
	Total	9
	Program Total	67

All course descriptions can be found on the college's online catalogue. http://catalog.volstate.edu/ (All program courses have the prefix 'MLAB.')

Current clinical sites include:

Centennial Medical Center Greenview Regional Hospital Livingston Regional Hospital Northcrest Medical Center St. Thomas Hospital Midtown St. Thomas Hospital West Southern Hills Medical Center Summit Medical Center Vanderbilt Wilson County Hospital Vanderbilt Bedford County Hospital Tennessee State Laboratory Laboratory Mgmt. Services, LLC. Cookeville Regional Medical Center
Hendersonville Medical Center
Macon Community Hospital
Pathgroup Laboratories
St. Thomas Hospital Rutherford
Skyline Medical Center
Stonecrest Medical Center
Sumner Regional Medical Center
Horizon Medical Center
Graves Gilbert Clinic
Med. Center Health – KY
-Bowling Green, Franklin, Scottsville

Accreditation

Volunteer State Community College is accredited by the Commission on Colleges, Southern Association of Colleges and Schools http://www.sacs.org/. The Medical Laboratory Technology program of Volunteer State Community College is accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS http://www.naacls.org), 5600 N. River Rd., Suite 720, Rosemont, Illinois 60018: (773) 714-8880. Accreditation by NAACLS assures students that they will be provided with a quality education in laboratory medicine. Upon successful completion of the Associate of Applied Science Degree in Medical Laboratory Technology the graduate is eligible to sit for the national certification exam. Graduation from the program is not contingent upon passing an external certification exam.

Medical Laboratory Technology Program Pre-Program Checklist

1.	Complete all College Admission Criteria (http://www.volstate.edu/Admissions/).
2.	Successful completion of learning support courses (<i>if required</i>) as determined by the placement. (http://www.volstate.edu/advising/placement)
3	Complete or be in progress to complete all prerequisite courses required for the MLT Associate of Applied Science Degree. A minimum GPA 2.2 for these courses and a C or higher is required.
4.	Complete and submit the online MLT Program Application no later than March 15 th for Full-Time Program and October 15 th for Part-time Program. The application form is available at https://www.volstate.edu/academics/health-sciences/medlabtech/application .
5.	Three reference forms completed and submitted to the Program office no later than April 1st for the Full-Time Program and November 1st for the Part-Time Program. Reference forms can be found in the information packet.
6.	Complete an interview for screening purposes. Applicants will be contacted at for interview dates.

After conditional acceptance into the program is granted, students must pass a background check and drug screen, and demonstrate immunity to Hepatitis B (or show proof of receiving the first Hepatitis B vaccine or sign a waiver refusing the vaccine). In addition, a colorblindness test is required. Students with abnormal results will be assessed to determine if they can successfully complete the program. Any student that cannot successfully complete the program will be dismissed.

Either the failure to provide the required results by the due date or failing the background check or drug screen will make the student ineligible to continue to clinical rotations and remain in this program.

The background check, urine drug screens, Hepatitis B vaccine and other health screens are performed at the student's expense. (There are several health screening requirements including various vaccinations and health insurance. <u>Specific details are given to students after conditional acceptance into the program is granted.</u>)

Additional Program Costs

Students are responsible for any and all additional costs. These costs include but may not be limited to the following:

- Students admitted into the Medical Laboratory Program are required to wear professional clothing or scrubs for all of the clinical courses, so they must purchase sufficient numbers of these uniforms.
- Textbooks may be purchased at the VSCC Bookstore. Students are not limited to where they purchase textbooks.
- A background check must be completed and passed before clinical practicum rotations begin.
- A Drug Screen must be completed and passed before attending clinical practicum rotations.
- Immunizations must be current, and the student's general good health must be documented.
- Appropriate insurance (health and professional liability) must also be purchased. If health
 insurance is obtained through the Affordable Care Act, pay attention to enrollment
 deadlines (often in February).

The following estimated program costs are subject to change (excludes tuition and fees):

1. VSCC Application Fee	free	
2. Program Books (estimated)	Summer semester Fall semester Spring semester	\$500.00 \$300.00 \$300.00
3. Clinical costs (estimated)		
•	sical examination	possibly no cost
Dise	ase screening (titers)	\$ 80.00
Hepa	atitis B immunization/ titer	\$250.00
Mea	sles, Mumps, Rubella Vaccination	\$ 70.00
Chic	ken pox Vaccination	\$125.00
Tube	erculosis (TB) QuantiFERON	\$100.00
Colo	r blindness test	possibly no cost
Malp	ractice Liability Insurance	\$ 13.00
Heal	th Insurance	TBD by provider
BLS	Certification	\$60.00
Lab	Coat	No cost
Back	ground check	\$ 46.50
	State Training License	No cost
	screen test-10 panel (2)	\$31.00 each
	essional dress/scrubs	\$200.00

4. Professional Fees

National Board Certification exam (only one of the following is required):

ASCP BOC	\$215.00
AMT	\$175.00
State Professional License (optional)	\$ 60.00
State Background check (optional)	\$ 45.00

Volunteer State Community College Medical Laboratory Technology Program Reference Form

TO THE APPLICANT: Three reference forms are due by April 1st for the Full-Time Program and November 1st for the Part-Time Program.

November 1 for the 1 a	rt-riilic i rograi					
Applicant Name:	Vol State ID Number:					
TO THE REFERENCE: To Volunteer State Commun of the applicant's qualificate eileen.ricker@volstate.e	ity College and hations will be gre	nas given	your name as	s a reference	. Your candid	evaluation
What is your relationship	to the applicant?					
How long have you known	the applicant? _					
Rate the applicant for the	Characteristics Superior 5	listed belo	ow:	2	Poor 1	Not
Characteristics	Сиропол	4	3	2	Pool I	Applicable
Academic Potential						
Adaptability						
Attendance						
Math & Computer Skills						
Maturity						
Oral Communication						
Organization						
Punctuality						
Reliability						
Team Work						
Written Communication						
COMMENTS: Please include abilities and potential as						
Reference's Name and T	itle:			Date		