

**Volunteer State Community  
College  
Medical Laboratory Technology  
Program  
  
Information Packet**

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Dear Prospective MLT Student,

It is my pleasure to introduce you to the field of medical laboratory technology. Medical Laboratory Technicians (MLTs) perform a wide variety of clinical laboratory tests and are of critical importance in the health care workforce. The Medical Laboratory Technology Program is designed to prepare you to enter the work force as a generalist Medical Laboratory Technician (MLT). You will learn the theory and principles behind the tests you will perform and learn to correlate the results with patient's conditions. As part of your educational journey, you will also earn general education credits including science, math, humanities and communications which lead to an Associate in Applied Science (A.A.S.) Degree. Upon graduation, you will be eligible for both Tennessee State professional licensure and to sit for the national certification examination.

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

If you would like to schedule an advising session, please contact me at [robin.ward@volstate.edu](mailto:robin.ward@volstate.edu).

Sincerely,

*Robin Ward*

Robin Ward, MSAH, MLS (ASCP<sup>cm</sup>)  
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 a national 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. All program applications must be received by March 15<sup>th</sup> each year. The MLT program application can be located at [VSCC MLT Application](#). Students must submit a minimum of three references forms by April 1<sup>st</sup> of the year they apply to the program. Professional and/or academic references are preferred. The reference forms can be found towards the end of this document.

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 starting in May of 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 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 15<sup>th</sup> each year. The MLT program application can be located at [VSCC MLT Application](#). Students must submit a minimum of three references forms by November 1<sup>st</sup> of the year they apply to the program. Professional and/or academic references are preferred. The reference forms can be found towards end of this document.

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 16-24 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 2.7 in those courses and a C or higher in the individual course.

*Table 1 Fall Prerequisite Schedule*

<b>FALL- 1st year</b>	<b>Course</b>	<b>Hr</b>
<b>ENGL 1010-or</b>	English Composition I	<b>3</b>
<b>BIOL 2010</b>	Human Anatomy & Physiology I (Lecture and Lab)	<b>4</b>
<b>MATH 1010-or</b>	Math for General Studies	<b>3</b>
<b>PSYC 1030-or</b>	Introduction to Psychology	<b>3</b>
<b>MLAB Elective</b>	*See college catalog for options <a href="#">College Catalog</a>	<b>3</b>
	<b>Total</b>	<b>16</b>

*Table 2 Spring Prerequisite Schedule*

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

**Courses after acceptance into the Full-Time MLT Program:***Table 3 Summer Full Time MLT Cohort Schedule*

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

*Table 4 Fall Full Time MLT Cohort Schedule*

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

*Table 5 Spring Full Time MLT Cohort Schedule*

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

**Courses after acceptance into the Part-Time MLT Program:***Table 6 Spring Part Time MLT Cohort Schedule*

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

*Table 7 Summer Part Time MLT Cohort Schedule*

<b>SUMMER- 2<sup>nd</sup> year</b>	<b>Course</b>	<b>Hrs</b>
<b>MLAB 2403</b>	Clinical Microbiology	<b>4</b>
<b>MLAB 1510</b>	Clinical Practicum	<b>5</b>
	<b>Total</b>	<b>9</b>

*Table 8 Fall Part Time MLT Cohort Schedule*

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

Table 9 Spring Part Time MLT Cohort Schedule

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

All course descriptions can be found on the college's online catalogue. [Vol State Academic Catalog](#) (All program courses have the prefix 'MLAB.')

Current clinical sites include:

Table 10 Clinical Practicum Sites

<b>AFFILIATES</b>
Centennial Medical Center
Cookeville Regional Medical Center
Greenview Regional Medical Center
Hendersonville Medical Center
Highpoint Sumner Medical Center
Highpoint Trousdale Medical Center
Horizon Medical Center
Lab Management Services (HCA)
Livingston Regional Medical Center
Macon Community Hospital
Medical Center of Bowling Green (KY)
Medical Center of Caverna (KY)
Medical Center of Franklin (KY)
Medical Center of Russellville (KY)
Northcrest Medical Center
PathGroup Laboratories, Inc.
Saint Thomas w/ LabCorp Hickman
Saint Thomas w/ LabCorp Highlands
Saint Thomas w/ LabCorp Dekalb
Saint Thomas w/ LabCorp Midtown
Saint Thomas w/ LabCorp River Park
Saint Thomas w/ LabCorp Rutherford County
Saint Thomas w/ LabCorp Stones River
Saint Thomas w/ LabCorp Three Rivers
Saint Thomas Hospital w/ LabCorp West

Skyline Medical Center
Southern Hills Medical Center
Stonecrest Medical Center
Tennessee Department of Health
TriStar Summit Medical Center
Vanderbilt Bedford County Hospital
Vanderbilt Wilson Country Hospital

### Accreditation

Volunteer State Community College is accredited by the Commission on Colleges, Southern Association of Colleges and Schools [SACS Website](#) . The Medical Laboratory Technology program of Volunteer State Community College is accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS [NAACLS Website](#)), 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. The program is also licensed by the Tennessee State Medical Laboratory Board. 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 [VSCC Admission Criteria](#)
2. \_\_\_\_ Successful completion of learning support courses (**if required**) as determined by the placement. [VSCC Placement Testing](#)
3. \_\_\_\_ Complete or be in progress to complete all prerequisite courses required for the MLT Associate of Applied Science Degree. A minimum GPA 2.7 for these courses and a C or higher is required.
4. \_\_\_\_ Complete and submit the online MLT Program Application no later than **March 15<sup>th</sup> for Full-Time Program and October 15<sup>th</sup> for Part-time Program**. The application form is available at [VSCC MLT Program Application](#)
5. \_\_\_\_ Three reference forms completed and submitted to the Program office no later than **April 1<sup>st</sup> for the Full-Time Program and November 1<sup>st</sup> for the Part-Time Program**. Reference forms can be found in the information packet. Students transferring from another Health Science program (MLT or other) MUST have a reference form completed by the Program Director of the previously attended program.
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 color-blindness 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. Specific details are given to students after conditional acceptance into the program is granted.)



### 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):

<b>1. VSCC Application Fee</b>		free
<b>2. Program Books (estimated)</b>	Summer semester	\$500.00
	Fall semester	\$300.00
	Spring semester	\$300.00
<b>3. Clinical costs (estimated)</b>		
	Physical examination	possibly no cost
	Disease screening (titers)	\$ 80.00
	Hepatitis B immunization/ titer	\$250.00
	Measles, Mumps, Rubella Vaccination	\$ 70.00
	Influenza Vaccination	\$ 30.00
	COVID Vaccination (clinical site discretion)	\$ 30.00
	TDAP Vaccination	\$125.00
	Chicken pox Vaccination	\$125.00
	Tuberculosis (TB) QuantiFERON	\$100.00
	Color blindness test	possibly no cost
	Malpractice Liability Insurance	\$ 13.00
	Health Insurance	TBD by provider
	BLS Certification	\$60.00
	Lab Coat	No cost
	Background check	\$ 46.50
	TN State Training License	No cost
	Drug screen test-10 panel	\$31.00
	Professional dress/scrubs	\$200.00
<b>4. Professional Fees</b>		
	National Board Certification exam (only one of the following is required):	
	ASCP BOC	\$225.00
	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 1<sup>st</sup> for the Full-Time Program and November 1<sup>st</sup> for the Part-Time Program.** Students transferring from another Health Science program (MLT or other) MUST have a reference form completed by the Program Director of the previously attended program regardless of previous program completion.

Applicant Name: \_\_\_\_\_ Vol State ID Number: \_\_\_\_\_

**TO THE REFERENCE:** This applicant has applied to the Medical Laboratory Technology Program at Volunteer State Community College and has given your name as a reference. Your candid evaluation of the applicant's qualifications will be greatly appreciated. **Submit the completed form directly to [robin.ward@volstate.edu](mailto:robin.ward@volstate.edu).**

What is your relationship to the applicant? \_\_\_\_\_

How long have you known the applicant? \_\_\_\_\_

Rate the applicant for the Characteristics listed below:

*Table 11 Reference Ratings*

Characteristics	Superior 5	4	3	2	Poor 1	Not Applicable
Academic Potential						
Adaptability						
Attendance						
Math & Computer Skills						
Maturity						
Oral Communication						
Organization						
Punctuality						
Reliability						
Teamwork						
Written Communication						

**COMMENTS:** Please include any comments that will provide a complete picture of the applicant's abilities and potential as a student and health care professional. Use an extra page if necessary.

\_\_\_\_\_  
 \_\_\_\_\_

Reference's Name and Title: \_\_\_\_\_

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