

# MLT STUDENT HANDBOOK

Raritan Valley Community College 118 Lamington  
Road, Branchburg NJ 08876

## MLT Student Handbook

## Table of Contents

a- Introduction	page 2
b- Accreditation Status	page 2
c- Program Mission Statement	page 3
d- Learning Outcomes	page 4
e- Program Outcomes	page 4
f- Program Officials and Contact Information	page 4
g- Admission Process	page 5
h- Program Requirement	page 8
i- Program Description	page 10
j- Course/Curriculum Information	page 11
k- Program Sequence	page 14
l- Tuition	page 19
m- MLT Entry-Level Competencies	page 21
n- Graduation Requirements	page 22
o- Campus Resources	page 24
p- Code of conduct/Dismissal	page 27
q- Handbook Signature Page	page 29

## Introduction

The Medical Laboratory Technology AAS program at Raritan Valley Community College provides students with the foundation in clinical laboratory sciences required for entry into the healthcare field as a medical laboratory technician and prepares students to function effectively as a member of a medical laboratory team. Through a combination of classroom, laboratory, and clinical experiences in clinical microbiology, clinical chemistry, hematology, immunology, immunohematology, and urinalysis, students will learn how to perform diagnostic laboratory tests used in the prevention, diagnosis, and treatment of disease. The program will prepare students to take the national MLT(ASCP) certification exam.

The program is composed of two segments – the MLT Pre-Clinical Program that consists primarily of 100-level General Education foundation courses and the MLT Clinical Program that includes 100 and 200-level clinical laboratory courses and clinical rotations. Upon completion of the MLT Pre-Clinical Program requirements, students will apply for admission to the MLT Clinical Program.

Students who complete the program will be able to:

- Collect and process biological samples using standardized laboratory practices
- Accurately perform analytical testing and correlate the test results with human health
- Comply with state and federal regulations governing clinical laboratories
- Demonstrate effective communication as a member of a medical laboratory team

All courses are offered on campus Monday through Friday as a day program at this time. The clinical training is offered off campus and schedule is determined after consulting with the clinical site coordinator.

## Accreditation Status

At this time, the MLT program is seeking accreditation by NAACLS and has been recognized as Serious Applicant for initial Accreditation. For more information on NAACLS, please visit the website, [www.naacls.org](http://www.naacls.org)

The granting of a degree from Raritan Valley Community College is not contingent upon the passing of the certification examination.

Raritan Valley Community College is accredited by the Commission on Higher Education, Middle States Association of Colleges and Schools, 3624 Market Street, Philadelphia, PA 19104, 215-662-5605. <https://www.msche.org/>

**RVCC Mission Statement**

Raritan Valley Community College is an educational community that works to develop critical thinking, foster intellectual curiosity, promote leadership, encourage social responsibility, support personal growth, and sustain engaged citizenship within a diverse population of students and community members. The [link](#) to the mission statement can be found here.

**MLT Program Mission Statement**

The mission of the MLT Program is to prepare individuals, from diverse backgrounds, for employment by providing quality didactic and clinical training. The program is committed to produce knowledgeable and professionally skilled medical laboratory technicians, capable of higher order critical thinking processes who are aware of the importance of continuing education in medical laboratory science.

**Diversity Statement**

Raritan Valley Community College values all aspects of diversity including but not limited to race, sexual orientation, religion, age, sex, national origin, disability, socioeconomic status, and political and philosophical perspectives. We rely on diversity to enrich the intellectual environment for students and employees. We support educational access and opportunity by recruiting and retaining a diverse college community. We foster diversity by developing and maintaining curricular and social programs that infuse the contributions of all people, and by preparing students to excel in a global society. Our commitment to diversity is reflected in the College's Mission Statement and Strategic Goals, all of which support excellence in teaching, learning and professional development in a welcoming and respectful climate.

**Student Conduct**

Upon admission to the College, a student incurs the responsibility for becoming familiar with and abiding by, the provisions of the Code. Accused student(s) are presumed to be not responsible for violations. All Code of Conduct Disciplinary proceedings use the preponderance of the evidence standard (which is "more likely than not" and the standard used by civil courts in the United States). This standard requires that the Disciplinary Review Board or Conduct Officer be persuaded that it is more likely than not that the allegations brought against the accused student are true. Violations of the Code may result in a student receiving a failing grade on an assignment or in a course, required community service, Disciplinary Warning, Disciplinary Probation, Disciplinary Suspension, Disciplinary Expulsion, or another appropriate penalty. More information can be found on the [link](#).

### Program Outcomes

Currently, there is no data available for program outcomes. As the data becomes available, the following outcomes will be published for prospective students.

Graduation Rate	
ASCP BOC Pass Rate	
Placement Rate	

### Program Learning Outcomes

Upon successful completion of the Medical Laboratory Technology AAS program graduates will be able to:

1. Collect and process biological samples using standardized laboratory practices.
2. Accurately perform analytical testing and correlate the test results with human health.
3. Comply with state and federal regulations governing clinical laboratories.
4. Demonstrate effective communication as a member of a medical laboratory team.

### Program Officials and Contact Information

Program Officials	Contact Information
President Michael McDonough, Ph.D.	<a href="mailto:michael.mcdonough@raritanval.edu">michael.mcdonough@raritanval.edu</a> 908 5261200 Extension 8870
Provost   Vice President for Academic Affairs Karen Bearce, Ph.D.	<a href="mailto:karen.bearce@raritanval.edu">karen.bearce@raritanval.edu</a> 908 5261200 Extension 8202
Dean, Division of STEM & Health Sciences Sarah Imbriglio, Ph.D.	<a href="mailto:Sarah.Imbriglio@raritanval.edu">Sarah.Imbriglio@raritanval.edu</a> 908 5261200 Extension 8241
Chairperson, Science & Engineering Department Marianne Baricevic, Ph.D.	<a href="mailto:Marianne.Baricevic@raritanval.edu">Marianne.Baricevic@raritanval.edu</a> 908 5261200 Extension 8535
Program Director Siddra Dar, M.S. MLS ASCP <sup>CM</sup>	<a href="mailto:Siddra-majeed.dar@raritanval.edu">Siddra-majeed.dar@raritanval.edu</a> 908 5261200 Extension 8282

## Admission Process

Students seeking admission to the MLT Program should apply to the Raritan Valley Community College Office of Admissions. RVCC application must include proof of high school completion or GED, and transcripts from all colleges attended. Admission applications are reviewed by the admissions staff and the MLT Program Director. The [link](#) to the Office of Admissions can be found here. The information on admission to the MLT program can be found on this [link](#). You can also find the MLT checklist on this [link](#).

## Admission – Pre-Clinical MLT

Students interested in pursuing the MLT Clinical Program will initially be enrolled into the AS in Health Science degree as Pre-MLT majors. Students must complete the MLT Pre-Clinical Program requirements in order to become eligible to apply for selective admission to the MLT Clinical Program.

### MLT pre-CLINICAL PROGRAM REQUIREMENTS

#### First YEAR – Fall

BIOL 124	Human Anatomy & Physiology I	4 credits
CHEM 102	Introduction to Chemistry	4 credits
ENGL 111	English Composition I	3 credits
PHIL 114	Ethics	3 credits
<b>Total Credits</b>	<b>14 credits</b>	

#### FIRST YEAR – Spring

BIOL 111	Principles of Biology	4 credits
BIOL 125	Human Anatomy & Physiology II	4 credits
Mathematics		3 credits <sup>1</sup>
ENGL 112	English Composition II	3 credits
MLTC 100	Introduction to MLT	1 credits
<b>Total Credits</b>	<b>15 credits</b>	

<sup>1</sup> MATH 110 Statistics I may be required for certification in the state of New York.

## Admission– Clinical MLT Program

The MLT Clinical Program requires full-time attendance, and students are only admitted to the program for a July start. The MLT Clinical Program will run from July through June. During this time, students must be available to take classes during the day and have reliable transportation to all clinical sites. In some cases, clinical rotations may be scheduled during the evening or overnight shifts. A minimum grade of 'C' is required in each MLTC course for continued matriculation in the MLT Clinical Program.

All Pre-Clinical Program Requirements or equivalent transfer credit must have a minimum grade of 'C' and must be completed prior to the application deadline. Science and Math courses (BIOL, CHEM, MATH) must be taken no more than ten years prior to application for the MLT Clinical Program. A cumulative GPA of 2.5 is required, including courses transferred from a previous institution.

Admission to the MLT Clinical Program is conditional based on completion of medical requirements. Applicants are required to complete a background check, drug screen, and color-blindness test and to submit proof of required immunizations. Readmission within two years, if approved, is always on a space available basis and is only allowed once. Also, if students are accepted to reenter the program, they would need to join at the same point where they left.

Applicants are required to take the TEAS exam prior to the application deadline. See the link here for registration and exam information. <https://atitesting.com/teas/register>

The MLT Clinical Program requires full-time attendance, and students are only admitted to the program for a July start. The MLT Clinical Program will run from July through June. During this time, students must be available to take classes during the day and have reliable transportation to all clinical sites. In some cases, clinical rotations may be scheduled during the evening or overnight shifts. A minimum grade of 'C' is required in each MLTC course for continued matriculation in the MLT Clinical Program.

### **Application Deadline and Selection Criteria**

Applications are due on **May 15th** for admission to the MLT Clinical Program for the Summer II semester, and applicants will be notified of acceptance by **June 5th**. There will be a total of 12 students admitted each year. If seats are still available, a second round of applications will be considered till June 15th for notification by June 30th.

When the number of applicants exceeds the number of available seats, points will be assigned to each applicant based on the following criteria. Admission will be granted to the students with the most points.

- Up to ten (10) points will be awarded for academic performance in Science and Math Pre-Clinical requirements (BIOL, CHEM, MATH). One (1) point will be awarded for each 'B' grade, and two (2) points will be awarded for each 'A' grade.
- Up to ten (10) points will be awarded based on the TEAS test score. See the link here for registration and exam information. <https://atitesting.com/teas/register>
- Ten (10) points will be awarded to applicants with prior healthcare employment experience.
- Five (5) points will be awarded for applicants with prior healthcare volunteer experience.
- Honorably Discharged Military Veterans or will be awarded two (2) additional points.
- Applicants with a Bachelor's degree by the application deadline will be awarded two (2) additional points.
- Applicants who have completed MLT 100 with a 'B' or better by the application deadline will be awarded one (1) additional quality points.

**MLT CLINICAL PROGRAM REQUIREMENT****FIRST YEAR – SUMMER**

MLTC 110	Specimen Collection & Processing	2 credits <sup>2</sup>
MLTC 120	Urinalysis & Body Fluids	3 credits <sup>2</sup>
<b>Total Credits</b>		<b>5 credits</b>

**SECOND YEAR – FALL**

MLTC 201	Clinical Microbiology I	4 credits <sup>3</sup>
MLTC 202	Clinical Microbiology II	4 credits <sup>4</sup>
MLTC 210	Clinical Chemistry	4 credits <sup>3</sup>
MLTC 130	Immunology	3 credits <sup>4</sup>
MLTC 290	Clinical Experience: Urinalysis & Body Fluids	1 credit <sup>4</sup>
<b>Total Credits</b>	<b>16 credits</b>	

**SECOND YEAR – SPRING**

MLTC 220	Immunochemistry	4 credits <sup>3</sup>
MLTC 230	Hematology	4 credits <sup>3</sup>
MLTC 250	MLT Seminar	2 credits <sup>4</sup>
MLTC 292	Clinical Experience – Microbiology	2 credits <sup>4</sup>
MLTC 294	Clinical Experience – Chemistry & Immunology	2 credits <sup>4</sup>
<b>Total Credits</b>		<b>14 credits</b>

**SECOND YEAR – SUMMER**

MLTC 296	Clinical Experience – Hematology	2 credits <sup>5</sup>
MLTC 298	Clinical Experience – Immunochemistry	2 credits <sup>5</sup>
<b>Total Credits</b>		<b>4 credits</b>
<b>PROGRAM TOTAL</b>		<b>68 credits</b>

<sup>2</sup> Offered during the six-week Summer II Session.<sup>3</sup> Offered during the first seven-week session.<sup>4</sup> Offered during the second seven-week session.

<sup>5</sup> Offered during the six-week Summer I Session.

## **PROGRAM REQUIREMENT**

### **A. Essential Cognitive Functions:**

The MLT student must possess the following intellectual skills:

- communicate effectively in written and spoken English
- possess and apply mathematical skills
- possess the psychological health required for full utilization of abilities: reasoning, sound judgment, analytic ability

### **B. Essential Psychomotor Functions:**

The MLT student must be able to:

- move freely from one location to another in physical locations such as the clinical laboratory, patient care areas, corridors, and elevators
- possess sufficient eye motor coordination to allow delicate manipulations of specimens, instruments, and tools
- grasp and release small objects (test tubes, pipettes, microscope slides)
- manipulate other laboratory materials (reagents, manual and automated pipettes, etc.)
- identify and distinguish objects macroscopically and microscopically
- lift and move objects of at least 20 pounds
- possess a sense of touch and temperature discrimination
- use hands for repetitive activity

### **C. Essential Affective Functions**

The MLT student must be able to:

- follow written and verbal directions
- work effectively under time constraints and under pressure
- work independently
- prioritize workload, according to laboratory department needs, when multitasking
- maintain alertness and concentration in a loud and hectic environment
- apply knowledge, skills, and values learned from course work and life experiences to new situations
- work safely with potential chemical, radiological, and biologic hazards using standard precautions
- show respect for self and others
- projects an image of professionalism including appearance, dress, and confidence

### **D. Professional Appearance / Uniforms**

Students will be provided a lab coat for MLT student labs. During lab work, students are required to wear closed-toed, impervious, rubber soled shoes. During clinical rotations, students will wear scrubs. Closed toes shoes with rubber soles are required. Hair should be secured from the face in an orderly manner. Only modest non-dangling jewelry and minimum fragrance is appropriate. Students must maintain professional appearance. Students will follow the additional uniform/appearance policies of their clinical facility.

#### **E. Immunization/Drug Screen/Background Requirement**

Prior to clinical rotation, students are required to provide immunization/titer results. All MLT students will be provided necessary information to get their immunization/titers before the first semester of clinical part of the program. It is students' responsibility to complete the required immunizations/titers in a timely manner. Student placement at the clinical site may be significantly delayed due to lack of immunization/titer results.

Below is the list of immunization/titer/medical requirement

- QuantiFERON Gold test, documentation of a chest X-ray is required if positive
- Hepatitis B vaccine
- Hepatitis Antibody titer
- Measles (Rubeola) titers
- German measles (Rubella) titers
- Chicken Pox (Varicella) titers
- Mumps titers
- Tdap (tetanus, diphtheria, pertussis) within past 10 years
- Current Flu Vaccine
- COVID 19 vaccine
- Color Blind Test

Anyone who presents with low titer must receive the immunization before the deadline. Remember, some of the immunizations require multiple doses requiring additional time. Students will be admitted to the clinical sites only after completing the immunization requirement.

#### **F. Background Clearance**

Students will also be required to provide FBI and criminal background clearance.

**Students must have the background clearance and immunization records before 7/15/2024.**

**Students who have failed to complete the above requirements will not be placed for clinical rotations.**

Background clearance must be done through

[www.adamsafeguardstudents.com](http://www.adamsafeguardstudents.com)

Students are required to notify the MLT Program Director in writing if there has been any change that could affect their clearance. The cost associated with this is the responsibility of the student.

### **G. Drug Screen**

Students are required to submit the urine drug screen results for clinical rotation

Urine drug screening must be paid for and scheduled via

[www.adamsafeguardstudents.com](http://www.adamsafeguardstudents.com)

The drug screen must be initiated **after 8/1/2024 only**. DO NOT ORDER THE DRUG TEST OUTSIDE THE TESTING DATES- Please do not order ahead of time! If you are unsure, contact the Program Director. The cost of initial and any repeat urine drug screen/s is the responsibility of the student.

### **Tentative Schedule for Program Requirements**

The following schedule is given as a guideline for students to start the process of immunization and background clearance. Students must have all required documents by the deadline dates.

Requirement	Start	Completed by
Immunizations/Titers	Upon admission	07/15/2024
FBI & Background Clearance	Upon admission	08/01/2024
Drug Screen	8/1/01/2024	8/28/2024

### **Program Description**

The program is composed of two segments – the MLT Pre-Clinical Program that consists primarily of 100-level General Education foundation courses and the MLT Clinical Program that includes 100 and 200-level clinical laboratory courses and clinical rotations. The total number of credits for completion of the MLT program is 68. All courses are offered on campus face to face along with the labs. The clinical rotations are completed in one of the clinical sites.

The MLT-Pre-Clinical program consists of two 15 weeks semesters during which students will complete pre-requisites and foundation courses. The MLT Clinical Program consists of six 7 weeks semesters during which students complete the core MLT courses that are associated with labs. These courses include Microbiology, Chemistry, Hematology, Immunology, Blood Bank and Urinalysis. Students will complete the clinical rotation during the third, fifth and sixth (last) semester of MLT clinical program. Students also take MLT seminar course in the fifth semester which prepares them for ASCP BOC MLT exam.

In order to ensure that the students demonstrate basic MLT entry level competencies, the program requires that a student scores a final numerical grade of C or higher in all MLT courses to progress through the program.

### **Curriculum/Course Information**

The main components of the curriculum include the following:

1. Pre-analytical, analytical, and post-analytical components for all major areas practiced in the contemporary clinical laboratory such as:
  - a. collecting, processing, and analyzing biological specimens and other substances
  - b. principles and methodologies
  - c. performance of assays
  - d. problem-solving and troubleshooting techniques
  - e. significance of clinical procedures and results
  - f. principles and practices of quality assessment
2. Application of safety and governmental regulations compliance
3. Principles and practices of professional conduct and the significance of continuing professional development
4. Communications sufficient to serve the needs of patients, the public, and members of the health care team

### **MLTC 100 Introduction to MLT**

This course introduces basic principles, techniques and vocabulary applicable to medical laboratory technology. It will provide an overview of professional societies and major regulatory agencies of the Health Care System, and introduce the theory behind safety procedures and standards and lab information systems. The course will cover the training and education required for Medical Laboratory Technicians, with an emphasis on their role in health care.

### **MLTC 110 Specimen Collection and Processing**

Prerequisites: MLTC 100 with a grade of C or higher and BIOL 125 with a grade of C or higher; or permission of the instructor.

This course introduces proper technique for the collection and processing of patient specimens for clinical lab testing. It emphasizes venipuncture technique and its importance in sample quality. It also covers necessary communication skills, quality assurance, safety and infectious control

procedures, medical terminology, capillary blood collection, collection of specimens other than blood, and specimen handling.

### **MLTC 120 Urinalysis and Body Fluids**

Prerequisites: MLTC 100 with a grade of C or higher and BIOL 125 with a grade of C or higher; or permission of the instructor.

This course is the study of the structure of organs and functions of processes which result in urine and body fluid production. Emphasis will be on analysis and interpretation of test results and will include pathophysiological correlations to the test results. Topics will include urinalysis, cerebrospinal fluid analysis, serous fluid analysis, analysis of transudates, exudates and gastrointestinal contents and semen analysis.

### **MLTC 130 Immunology**

Prerequisites: MLTC 100 with a grade of C or higher and BIOL 125 with a grade of C or higher; or permission of the instructor.

This course is an introduction to basic concepts in immunology. It will present the classification, functions and interactions of components of the immune system. Detailed analysis of the development of the immune system, including specific immunoglobulin structure and functions, complement and the major histocompatibility complex, and genetics will be covered. In the lab, theory and practice of serological testing will be introduced with an emphasis on clinical significance and disease correlation. Traditional techniques and molecular methods for detection and confirmation of disease states will also be practiced.

### **MLTC 201 Microbiology I**

Prerequisites: MLTC 100 with a grade of C or higher and BIOL 111 with a grade of C or higher; or permission of the instructor.

This course is a comprehensive study of microorganisms of importance in human health and disease. The fundamental concepts of microbial evolution, genetics, and metabolism will be covered. Emphasis is placed on the causative agents of disease and their identification, pathogenesis, transmission, and control in laboratory, clinical and residential settings. Fundamental microbiological methods such as aseptic technique, culture methods, microscopy, metabolic and physiological tests, bacterial isolation and identification, and molecular analysis will be covered. Bacteriology is emphasized in this class.

### **MLTC 202 Clinical Microbiology II**

Prerequisites: MLTC 100 with a grade of C or higher and MLTC 201 with a grade of C or higher; or permission of the instructor.

This course is a comprehensive study of microorganisms of importance in human health and disease. The fundamental concepts of microbial evolution, genetics, and metabolism will be covered. Emphasis is placed on the causative agents of disease and their identification, pathogenesis, transmission, and control in laboratory, clinical and residential settings. Fundamental microbiological methods such as aseptic technique, culture methods, microscopy, metabolic and

physiological tests, microbial isolation and identification, and molecular analysis will be covered. Virology, parasitology and mycology are emphasized in this class.

### **MLTC 210 Clinical Chemistry**

Prerequisites: MLTC 100 with a grade of C or higher and CHEM 102 with a grade of C or higher; or permission of the instructor.

This course is an in-depth study of specimen processing, analysis, test interpretation and quality control procedures used in routine manual and automated clinical chemistry testing. It covers the concepts of clinical chemistry as they apply to the renal, digestive, respiratory and endocrine systems, and includes the chemistry of metabolism, protein synthesis, acid-base balance, enzymes and hormones. Homeostasis and disease state results will be analyzed and studied. Labs will include the theory, operation and maintenance of the analytical instruments and tools used to perform routine clinical chemistry tests.

### **MLTC 220 Immunohematology**

Prerequisites: MLTC 100, MLTC 110, and MLTC 130 with a grade of C or higher; or permission of the instructor.

This class covers the basic theory and concepts of antigen-antibody reactions as they relate to blood cell transfusions. The structure of blood group antigens and the genetics of their inheritance are closely examined. Antibody production and the role of antibodies in transfusion reactions are studied in depth. Methods are introduced for performing blood grouping and compatibility testing. Proper donor and component selection are also covered. Labs help students develop blood banking skills and provide hands on experience in blood bank procedures.

### **MLTC 230 Hematology**

Prerequisites: MLTC 100 with a grade of C or higher and BIOL 125 with a grade of C or higher; or permission of the instructor.

This course is a comprehensive examination of hematology and blood coagulation, including blood cell maturation, physiology, and morphology, and hemostasis theory and procedures. The lab develops skills used in the performance of hematology and coagulation analysis. Emphasis is on the mechanics of test procedures, interpretation of hematology test results, and correlation with disease.

### **MLTC 250 MLT Seminar**

Prerequisite: MLTC 100, MLTC 110, MLTC 120, MLTC 130, MLTC 201, MLTC202, MLTC210, MLTC220, MLTC230 with a grade of C or higher; or permission of the instructor.

This is a student-focused, capstone discussion course that will integrate the topics and concepts of the MLT program. Emphasis will be on reflection of the clinical experience and the MLT program in general. Job placement, certification and exam preparation will be addressed.

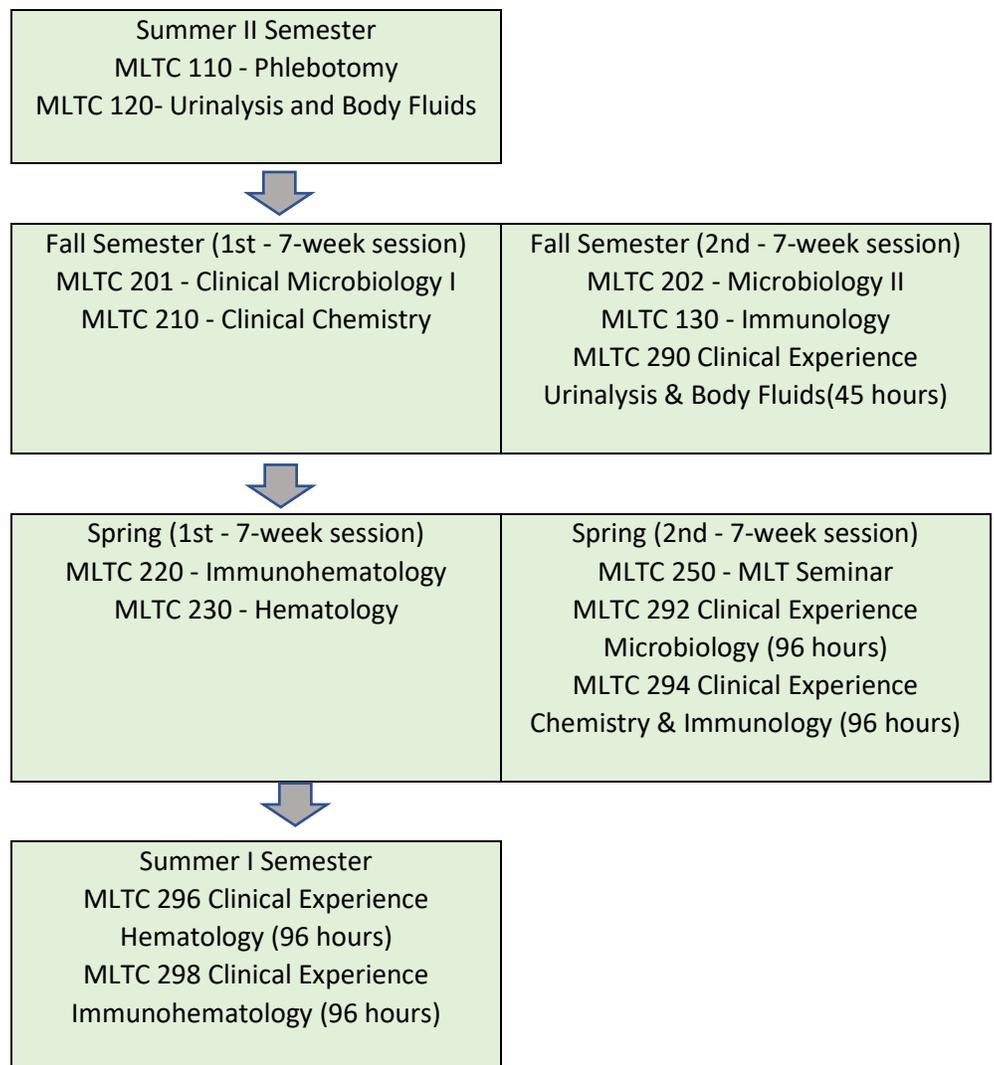
## **Program Sequence**

The MLT program at RVCC includes general education courses, MLT courses and clinical rotation.

During the Pre-Clinical program, students are required to take BIOL 111, CHEM 102, BIOL 124, BIOL15, ENGL 111, ENGL 112, PHIL 114, mathematics and MLTC 100.

Upon completion of the MLT Pre-Clinical Program requirements, students will apply for admission to the MLT Clinical Program. A minimum grade of C in each MLTC course is required for continued matriculation in the MLT Clinical program. All Pre-Clinical Program Requirements or equivalent transfer credit must have a minimum grade of 'C' and must be completed prior to the application deadline. Student must score a final numerical grade of C or higher in all MLT courses to progress through the program. Upon meeting the pre-requisite requirement, students complete MLT didactic courses followed by clinical rotations in the third, fifth and sixth semester of clinical MLT program.

The MLT Clinical Program courses must be taken in the sequence given below.



## Course Schedule

FALL 2023 SEMESTER		
08/30/2023 – 12/19/2023		
BIOL124	Human Anatomy and Physiology I	4 credits
CHEM 102	Introduction to Chemistry	4 credits
ENGL 111	English Composition 1	3 credits
PHIL 114	Ethics	3 credits

SPRING 2024 SEMESTER		
01/17/2024-05/08/2024		
BIOL 111	Principles of Biology	4 credits
BIOL 125	Human Anatomy and Physiology II	4 credits
MATH 110	Math/Statistics	3 credits
ENGL 112	English Composition II	3 credits
MLTC 100	Introduction to MLT	1 credit

SUMMER 2024 SEMESTER		
Summer II Session (07/08/2024 – 08/16/2024)		
MLTC 110	Phlebotomy	2 credits
MLTC 120	Urinalysis & Body Fluids	3 credits
	<b>Total Credits</b>	<b>5 credits</b>

FALL 2024 SEMESTER					
1 <sup>st</sup> 7-Week Session (8/28/2024-10/15/2024)			2 <sup>nd</sup> 7-Week Session (10/16/2024-12/09/2024)		
MLTC 201	Clinical Microbiology I	4 credits	MLTC 202	Clinical Microbiology II	4 credits
MLTC 210	Clinical Chemistry	4 credits	MLTC 130	Immunology	3 credits
			MLTC 290	Clinical Experience Urinalysis & Body Fluids (45 hours)	1 credit
	<b>Total Credits</b>	<b>8 credits</b>		<b>Total Credits</b>	<b>8 credits</b>

SPRING 2025 SEMESTER					
1 <sup>st</sup> 7-Week Session (1/22/25-3/18/25)			2 <sup>nd</sup> 7-Week Session (3/19/25-05/06/25)		
MLTC 220	Immuno-hematology	4 credits	MLTC 250	MLT Seminar	2 credits
MLTC 230	Hematology	4 credits	MLTC 292	Clinical Experience Microbiology (96 hours)	2 credits
			MLTC 294	Clinical Experience Chemistry & Immunology (96 hours)	2 credits
	<b>Total Credits</b>	<b>8 credits</b>		<b>Total Credits</b>	<b>6 credits</b>

SUMMER 2025 SEMESTER					
----------------------	--	--	--	--	--

Summer I Session (5/19/25 – 6/27/25)		
MLTC 296	Clinical Experience Hematology (96 hours)	2 credits
MLTC 298	Clinical Experience Immunohematology (96 hours)	2 credits
	<b>Total Credits</b>	<b>4 credits</b>

### Attendance Policy

It is expected that students will attend theory classes and learning laboratories on campus and clinical rotations in health care facilities. Absences in any of these areas may impeded student's successful progress. When a student has been absent for one-fifth (1/5 or 20%) of any component of a course (class and/or laboratories and/or clinical rotations) the student may be in jeopardy of not successfully achieving all the required student learning outcomes for the course. If you are unable to attend class and will miss an exam, you must notify the appropriate faculty member as soon as possible via voicemail or RVCC email. It is the student's responsibility to obtain notes from any classes missed from peers.

### Grading Policy

All students must score at least a letter grade of 'C' to progress in the program.

Letter Grade	Numerical Average
A	90.0-100
B	80-89.9
C	70-79.9
D	60-69.9
F	<60

### Clinical Course Grading

Students in the clinical courses are graded by the clinical site instructors. The clinical sites are provided the detailed rubric for assessment.

### Clinical Course Grading

Students in this course are evaluated by the following methods.

- a. Observation by clinical site instructors
- b. Weekly Journal
- c. Presentation

### Observation by Clinical Site Instructor

The clinical sites are provided the detailed rubric for assessment.

### Grading Scale

Grade	Description
3	Performs adequately, meets basic standards
2	Little evidence of meeting basic standards
1	Basic standards not observed at this point

### Grading Rubric

Students in clinical rotation are evaluated by the following criteria. Clinical site instructor must complete the grading within 48 hours of student's rotation for each of the discipline. A copy of the rubric is included at the end of this handbook for instructor's use.

<b>Practice laboratory safety and regulatory compliance</b>	<b>Rating</b>		
Practice standard precautions	1	2	3
Locate emergency equipment	1	2	3
Demonstrate appropriate handling and disposal of biohazardous waste	1	2	3
Demonstrate appropriate use of PPE	1	2	3
Follow HIPAA regulations	1	2	3
<b>Collect and process biological specimens</b>			
Identify patient and specimens accurately	1	2	3
Process lab specimens per standards	1	2	3
Perform blood and other specimen collection procedures per standard guideline	1	2	3
<b>Monitor and evaluate quality control in the laboratory</b>			
Assess acceptability of QC results	1	2	3
Review QC results and take appropriate action	1	2	3
Use appropriate quality control protocol	1	2	3
<b>Apply modern clinical methodologies including problem solving and troubleshooting according to predetermined criteria</b>			
Perform procedures following laboratory guidelines	1	2	3
Recognize normal, abnormal and critical values	1	2	3
Take appropriate action following critical values	1	2	3
Operate laboratory instruments efficiently	1	2	3
Perform routine maintenance on laboratory instruments	1	2	3
Assist with troubleshooting	1	2	3
Determine reportability of results	1	2	3
<b>Correlate laboratory results to diagnosis of clinical conditions and/or diseases</b>			
Recognize and correlate lab test results to clinical findings	1	2	3
<b>Information Processing</b>			
Perform accurate data entry, manually and electronically	1	2	3
Review automated data for accuracy and consistency	1	2	3

Utilize Laboratory Information System (LIS)	1	2	3
<b>Professional behaviors, ethics, and appearance</b>			
Arrive on time	1	2	3
Adhere to the dress code	1	2	3
Demonstrate positive attitude	1	2	3
Communicate with colleagues and patients in a professional manner	1	2	3
Display respectful behavior	1	2	3
Apply ethical behaviors	1	2	3

### Weekly Journal

Students are expected to maintain the weekly journal noting the tasks that they perform at the clinical site. Weekly journal must be submitted to program director at the end of the clinical rotation and needs to be signed weekly by the clinical site instructor. Weekly journal is graded based on completion.

### Grading of Journal

#### Journal Evaluation Form

\*\*If student does not submit a journal, the grade awarded will be a zero. \*\*

Week	10 Points Each day attended on site is fully filled out with relevant details about the experience and duties performed	5 Points Information about the experience and duties performed are included but are not detailed	0 Points No journal was submitted or detail submitted was not appropriate
Week 1			
Week 2			
Week 3			
Week 4			
Week 5			
Week 6			
Week 7			
Overall Points			
Instructor Comments			

**Presentation**

At the end of the clinical rotation, students will present their clinical experience. Students must follow the rubric to prepare the presentation.

**Clinical Rotation Presentation Rubric**

**Rating Scale: 5=Excellent 4=Very Good 3=Average 2=Below Average 1=Poor**

<b>Preparedness</b>	<b>5</b>	<b>4</b>	<b>3</b>	<b>2</b>	<b>1</b>
1. Student was prepared for the presentation					
<b>Content</b>	<b>5</b>	<b>4</b>	<b>3</b>	<b>2</b>	<b>1</b>
1. The presentation included a company profile					
2. The explanation of the clinical rotation experience was thorough, contained sufficient					
3. The student evaluated the overall experience and was able to explain the impact it will have on his/her future career?					
<b>Creativity</b>	<b>5</b>	<b>4</b>	<b>3</b>	<b>2</b>	<b>1</b>
1. The presentation showed originality and					
<b>Presentation</b>	<b>5</b>	<b>4</b>	<b>3</b>	<b>2</b>	<b>1</b>
1. Professional Appearance					
2. Eye Contact					
3. Body Language					
4. Grammar/Diction					
5. Use of Visual Aides					

**Comments:** \_\_\_\_\_

<b>Score:</b>	<b>/50</b>	<b>Instructor's Signature:</b>	
---------------	------------	--------------------------------	--

**Tuition**

Tuition is subject to change.

**Application fee- \$25**

**General Services Fee - \$50 per credit hour.**

This fee does not apply to Concurrent Enrollment Program courses. The general fee is charged per credit each semester to all students to cover the costs associated with a broad array of student success services. Included in these services are career and academic advising, counseling, tutoring, maintaining and updating technology, and student engagement activities. The general fee supports RVCC's academic

curricula, support services for students (both in-person and virtual), and program offerings. The fee is not earmarked for a particular program or student; rather, it facilitates programs and services that enhance course offerings and academic support for all students.

**Hunterdon/Somerset Counties** - \$168 per credit

**Out-of-County** -\$238 per credit

**Late Registration Fee** - \$50 effective the first day of the start of the term.

**Official Transcript Fee** - \$10 for each transcript

**Returned Item Fee** - Students will be charged \$25 for each returned check, credit card charge, and/or ACH transaction.

**Replacement Diploma Fee** - \$15

**Graduation Fee** - \$35

### **Additional Costs**

MLT students are responsible for the following additional cost:

- Textbooks and other required course materials
- All required immunizations
- Background check
- Drug screen
- Scrubs for clinical rotations
- ASCP Application Fee

For further information on cost and tuition, go to the following to this [link](#)

### **Clinical Site Information**

Clinical site availability may change from year to year. An updated site list will be provided to the students before the start of the clinical rotations. An instructor to student ratio of 1:1 or 1:2 is maintained at the clinical site. Students must have reliable transportation to all clinical sites. Currently, program has letter of interest from the following sites:

- 1- Lab Corp
- 2- Robert Wood Johnson University Hospital
- 3- Hunterdon Medical Center
- 4- Raritan Bay Medical Center

### **Clinical Placement Policy**

Students will be assigned to a clinical site only after the completion of all pre-requisite courses and all health requirements, including a background check and drug screen. The MLT Program Director will assign a clinical site to each student after considering multiple factors, including the student's preference, but students will not be guaranteed placement at a requested site. Students must arrange

for reliable and punctual transportation to the clinical site and will be asked to withdraw from the clinical rotation if habitual tardiness or absenteeism develops. This may result in dismissal from the program. If the number of the students qualifying for clinical placement exceeds the clinical site positions available, students may be placed on a waiting list for clinical assignments.

### **Accidents/Injury/Incidents during Clinical Experience**

If a student is injured during a clinical agency experience they must be examined in the Emergency Room or Hospital Employee Health and/or by their private health care provider. Health clearance documentation must be submitted before the student can return to the clinical site. Relevant incident/occurrence reports for the clinical site and RVCC must be completed by the agency staff, RVCC faculty and student as needed. Students who experience a change in a health status during the semester are required to submit documentation with new Health Maintenance Clearance. Students must receive clearance from their private health care provider prior to returning to clinical site. Clearance document must state "Medically cleared for clinical"

### **Service Work Policy**

Students are not allowed to provide service work to replace their clinical training. A student must not replace an employee and may only work under the supervision of an employee during clinical training. Students who are already employed by the clinical site or find a position during the program, may work their scheduled hours, but all of the clinical rotation hours must be completed separately as a student under supervision. Students are required to inform the Program Director if a request is made by a clinical site to substitute an employee during clinical rotation hours.

### **MLT Entry Level Competencies**

Upon graduation, and at the time of employment, a medical laboratory technician will be able to demonstrate the following entry-level competencies:

Medical Laboratory Technicians are proficient in:

- a. Collecting, processing and analyzing biological specimens and other substances.
- b. Performing analytical tests on blood, body fluids, and other substances.
- c. Recognizing factors that affect procedures and results, and taking appropriate actions, within predetermined limits, when corrections are indicated.
- d. Performing and monitoring quality assurance and quality control within predetermined limits.
- e. Performing preventive and corrective maintenance of equipment and instruments or referring to appropriate source for repairs.
- f. Applying principles of safety.
- g. Demonstrating professional conduct and interpersonal communication skills with patients, laboratory personnel, other health care professions, and with the public.

- h. Recognizing the responsibilities of other laboratory and health care personnel and interacting with them with respect for their jobs and patient care.
- i. Applying basic scientific principles in learning new techniques and procedures.
- j. Relating laboratory findings to common disease processes.
- k. Establishing and maintaining continuing education as a function of growth and maintenance of professional competence.

### **Graduation Requirement**

At the beginning of the semester during which graduation is anticipated, a student must complete a Graduation Diploma Application and submit it to the Student Enrollment Center. Students who have applied for graduation but fail to meet the requirements at the conclusion of the semester must re-submit a new application when they intend to graduate. In addition to all course and credit requirements, students must also have a minimum grade point average of 2.0, both overall and within their program.

### **Teach-Out plan**

Program closures and teach-out plans are reviewed and approved by the College's Curriculum Committee. In the case of a program closure, incoming students would no longer be admitted to the MLT program, and students currently in the program would be notified of the closure. An instructional plan would be implemented to allow current students the opportunity to complete all instructional and clinical degree requirements within a two-year period.

The Teach-out Plan also addresses continuation of instruction in the event of clinical site closure or natural disasters that adversely impact the continuation of clinical training. Due to no fault of their own, students will either be placed at another, comparable clinical site for training completion or provided equivalent instructions either on campus or virtually in order to fulfill degree requirements and graduate from the program.

### **Academic Integrity Policy**

Suspected incidents of academic dishonesty, cheating, or plagiarism will be reported to the Divisional Dean. Upon confirmation of the student's offense by the appropriate Divisional Dean, the student will be subject to warnings and penalties up to and including suspension or dismissal from the College.

### **Academic Grievance**

Student complaints of an academic nature should initially be discussed between the student and the student's instructor. Failing a satisfactory resolution of the problem at this level, the student should consult with the appropriate department chairperson. Should the student still feel that a satisfactory resolution has not been achieved, the student may request that the appropriate Division Dean review the matter. Further information can be found on the [link](#) here.

### **Confidential Information and FERPA**

The Family Educational Rights and Privacy Act (FERPA) of 1974 protects the privacy of education records, establishes the right of students to inspect and review their education records, and provides guidelines for contesting information in these records that is believed to be inaccurate or misleading. Students have the right to inspect and review all of their education records maintained by the College. The College is not required to provide copies of records unless it is not reasonable convenient for students to inspect their records. Students have the right to request that the College correct records believed to be inaccurate or misleading. If the College decides, in response to such a request, not to amend a student's record, the student has the right to a formal hearing before the Dean of Student Services. After the hearing, if the College maintains its position that the student's record should not be amended, the student has the right to enter a statement into his/her records commenting on the contested information.

The College will not release any confidential information from a student's record without the written consent of the student, except for releasing information to:

- College officials with a legitimate educational interest
- Other institutions at which a student intends to enroll
- Certain government officials for the purpose of carrying out their lawful functions
- Appropriate parties involved with the awarding of financial aid to a student
- Organizations conducting appropriate research for the College
- Accrediting agencies
- Individuals who have obtained appropriate court orders or subpoenas
- Persons who have need for the information in cases of health and safety emergencies

The College may disclose Directory Information without the written consent of the student. Directory Information includes the following:

- Name, address, telephone number, and email address
- Date and place of birth
- Dates of attendance
- Enrollment status
- Previous institutions attended
- Major field of study
- Awards and honors
- Degrees and/or Certificates awarded including date of conferral
- Past and present participation in officially recognized College activities

- Height and weight of student athletes

Students may request the withholding of Directory Information. To ensure that such a request is properly processed, it must be submitted on the official “Request to Withhold Directory Information” form, which is available in the Office of Enrollment Services. The request to withhold information will remain in effect until the student submits a signed authorization for the release of Directory Information

### **Campus Resources**

In addition to the support available through MLT program, students are encouraged to explore and benefit from the following resources;

- The Evelyn S. Field Library at RVCC provides students with access to books, journals, scholarly articles, videos, databases, and other resources, as well as course-specific research support and information literacy instruction. The library also provides quiet study areas, group study rooms, and access to computers and printers.
- The Center for Accessibility and Inclusive Education ensures equal and integrated access for individuals with disabilities to all courses, programs, and activities. Reasonable accommodations are made for students with disabilities, including extended test time.
- The RVCC bookstore offers course textbooks and related material such as notebooks, journals, and calculators.
- The RVCC Testing Center provides placement and accommodations testing for prospective and current students.
- The Tutoring Center offers students who are currently enrolled in classes free tutoring and academic resources for most disciplines offered by RVCC.
- Open computer labs are available to students seven days a week.
- Black and white printers are available in the library and in all instructional and open computer labs for use by RVCC account holders.
- Advising and Counseling Services offers a wide range of services including academic advising, transfer counseling, personal counseling, international student advising, and workshops that focus on academic skills and personal development.
- Career Services enhances equitable student success by providing comprehensive career and life planning and employment preparation services. The staff is committed to fostering professional success through a guided process of individual growth and development and career exploration.
- Financial aid is available to full and part-time students. Our goal is to provide funds from the federal government, the state of New Jersey, and the RVCC Foundation for students who would not be able to complete their college education without financial assistance.

### **Early Alert**

Early Alert is an initial warning to students who are not making satisfactory academic progress and that they may be placed on Academic Probation if their record does not improve. Students in the MLT program must maintain a minimum of grade ‘C’ to continue into the program. Program director or faculty may also reach out to the students.

### **Harassment and Discrimination Policy**

It is the policy of the College to promote and maintain a work and academic environment in which all members of the College Community are treated with dignity and respect. The College recognizes the human dignity of each member of the College Community and expects all employees and students to promote respect and dignity for others so that all employees and students are free to pursue their goals in an open environment, able to participate in the free exchange of ideas, and able to share equally in the benefits of the College's employment opportunities and educational programs and activities. The College is committed to ensuring that all current and prospective employees and students are given equal opportunity and treatment and providing its students with an academic environment and its employees with a work environment free from discrimination and harassment. No student or employee shall be denied participation in, the benefits of, or be subjected to discrimination in any educational program or activity or in employment based upon membership or perceived membership in a protected class. Discrimination and harassment are strictly prohibited on the College campus and at any other location where the College offers programs or activities or sponsors events. Discrimination and harassment are also prohibited in connection with College programs, activities, and events and in terms and conditions of employment. Harassment or discrimination through social media or other electronic communication is also prohibited. This prohibition against discrimination and harassment applies to all students, prospective students, employees, and prospective employees of the College, including student workers, and to all consultants, contractors, and other individuals performing work for the College. REPORTING DISCRIMINATION OR HARASSMENT Potential violations of this policy must be reported immediately to:

Cheryl Wallace, Executive Director of Human Resources  
[Cheryl.wallace@raritanval.edu](mailto:Cheryl.wallace@raritanval.edu)

For more information on this policy, go to this [link](#).

### **Health and Safety**

RVCC is concerned about safety and well-being of its students, faculty and staff. Student safety is ensured on campus by following means:

**Department of Campus Safety:** The Department of Campus Safety at Raritan Valley Community College devotes significant resources to provide a safe campus for our students, faculty, staff and visitors. The Department of Campus Safety provides a variety of safety, emergency and informational services to ensure a safe and secure learning environment for all members of the campus community. The Campus Safety office is located on the lower level of Somerset Hall and is staffed 24 hours per day. The department maintains professional working relationships with all law enforcement, fire and emergency medical services that respond to the campus. The Campus Safety Department is staffed by 24 Campus Security Officers and supervisors who are trained in security and safety procedures.

To safeguard the campus, the department coordinates security patrols, provides asset protection and responds to calls for assistance. Campus Security Officers are assigned to both fixed posts and mobile patrols. Security patrols inside and outside campus buildings are conducted on foot, on bicycles and in vehicles. At the main Branchburg campus, Campus Security Officers provide coverage

24 hours per day, seven days a week. The College Welcome Center is staffed by a Security Officer 6:00 AM – 8:30 PM, Monday through Friday, and 7:00 – 10:00 AM on Saturdays.

Red colored emergency telephones are located throughout building hallways of the Branchburg campus and provide a direct link to the Campus Safety Office. Blue light Emergency Call Boxes are located in exterior parking lots of the Branchburg Campus. Emergency phones and call boxes can be used to report suspicious activity, fires, medical emergencies, crimes or to request a safety escort. Surveillance cameras are strategically located campus wide providing video surveillance of interior buildings and exterior parking lots. Cameras are monitored from the Campus Safety office. Video is recorded, and generally stored for a 30 day period.

The College's Annual Security Report includes policy statements that address College policies, procedures and programs concerning safety and security. In addition, three years of statistics are included for certain types of crimes that were reported to have occurred on campus and on public property within or immediately adjacent to the campus. The College's 2021 Annual Security Report is available [here](#).

**RAVE Mobile Safety Messaging System:** The primary emergency notification system for the College is the RAVE Mobile Safety messaging system. It is a voice, e-mail and text messaging emergency-alert system that is used as one means of providing time sensitive distribution of emergency alerts and timely warning of important information. It is used to inform the College community about ongoing threats to College safety and events that may significantly impact the campus. It is also used to disseminate information about weather-related emergencies that cause early dismissal or campus closings.

**Fire Safety:** Fire extinguishers are located in multiple locations in every college building. Regular fire evacuation drills are used to educate and train students and staff about evacuation procedures and familiarize them with emergency exits and routes to travel when exiting a building. Each building and floor has an assigned Safety Marshall, and evacuation maps are posted in all areas of college. In addition to fire evacuations, the fire alarm system can be used as a public address system to deliver audible emergency messages. These messages can be broadcast as a pre-set emergency message or deliver specific instructions to address an emergency situation.

**Emergency Management Program:** The College has a comprehensive Emergency Management Plan to address weather, technological, accidental or public safety emergencies. The College Emergency Operations Plan includes information for incident management teams, operational protocols and procedures, emergency sheltering and evacuation guidelines, as well as contingency and planning requirements. The College has a continuity plan to address continuity of operations for critical operational functions. Campus Safety develops, reviews and revises procedures regarding emergency preparedness and response, including evacuation, shelter-in-place and lockdown protocols.

**Automated External Defibrillators:** There are six Automated External Defibrillators (AEDs) on campus which require trained personnel to operate. The college offers AED training as part of its CPR training workshops.

## Disability Services

Raritan Valley Community College is committed to providing equal access to employment and to all college programs, services, and activities to persons with disabilities and fully complies with the regulations and stipulations of the American with Disabilities Act of 1990 and Section 504 of the Rehabilitation Act of 1973, as amended. The MLT program will, if requested, provide reasonable accommodations to otherwise qualified enrolled students unless: (a) such accommodations impose undue hardship to the institution ; or (b) direct threats of substantial harm to the health and safety of others due to the disability cannot be eliminated by any reasonable accommodations available that would allow the students to perform the essential functions; or, (c) such accommodations fundamentally alter the educational program or academic standards.

Any student who has a documented disability and wishes to self-identify should contact the Center for Accessibility and Inclusive Education at (908) 526-1200 ext. 8534, or email [caie@raritanval.edu](mailto:caie@raritanval.edu)

Accommodations are individualized and in accordance with Section 504 of the Rehabilitation Act and the Americans with Disabilities Act. In order to receive. Further information can be found on the [link](#) here.

Center for Accessibility and Inclusive Education  
College Center Suite C-124  
Phone: 908-526-1200 x8534  
Fax: 908-526-3494  
Email: [caie@raritanval.edu](mailto:caie@raritanval.edu)

**MLT Laboratory:** The MLT laboratory is equipped with numerous safety features, including a safety shower, eye wash stations, a fire extinguisher, a fire blanket, and sharps disposal containers. Personal protective equipment is provided to students for use in the lab, including disposable non-latex gloves, goggles, face shields, and disposable lab coats. Students are required to disinfect the work surfaces every day immediately before starting and upon completion of their lab tasks. Lab assistant maintains up-to-date Safety Data Sheet in MLT lab which is available to students if needed. Students are provided with the spill kit if an area becomes soiled during a lab procedure, and students must report any spill to the instructor. Students must also report any injury (cut, burn, needle stick) to the instructor immediately so that proper action can be taken and a Laboratory Incident Report can be filed.

## Student Code of Conduct

One of the core values of Raritan Valley Community College is fostering an environment of mutual respect, responsibility, and collaboration. The Student Code of Conduct (Code) establishes expectations of behavior for all students regardless of enrollment status or campus location. The provisions of the Code govern the actions of all students whether at a College-owned or managed location or at a College-sponsored or supervised function or event. This Code applies to behavior directed toward any member of the College Community as well as a student's conduct during Academic Placements. Upon admission to the College, a student incurs the responsibility for becoming familiar with and abiding by, the provisions of the Code. Violations of the Code may result in a student receiving a failing grade on an assignment or in a course, required community service, Disciplinary Warning, Disciplinary Probation, Disciplinary Suspension, Dismissal, or other appropriate penalty. The following is a portion of the Raritan

Valley Community College Code of Student Conduct. The entire document and relevant policies can be found online. If you have questions about the Code of Conduct or Academic Integrity Policy, contact the Dean of Student Affairs at [doss@raritanval.edu](mailto:doss@raritanval.edu)

**ACKNOWLEDGEMENT OF MLT PROGRAM STUDENT HANDBOOK**

I have received and reviewed the Raritan Valley Community College MLT Program Student Handbook. As an MLT student at Raritan Valley Community College, I accept responsibility to read the contents of this handbook and comply with the information contained within.

Print Name: \_\_\_\_\_

Print G#: \_\_\_\_\_

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

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

STUDENT COPY