

Technical and Vocational Programs

A 45 42 0 Medical Laboratory Technology – Associate in Applied Science

CONCENTRATION OVERVIEW

The Medical Laboratory Technology curriculum prepares individuals to perform clinical laboratory procedures in clinical chemistry, hematology, microbiology, and immunohematology that may be used in the maintenance of health and diagnosis/treatment of disease. Course work emphasizes mathematical and scientific concepts related to specimen collection, laboratory testing and procedures, quality assurance and reporting/recording and interpreting findings involving tissues, blood, and body fluids.



Upon completion of this concentration, graduates are eligible to take the examination given by the Board of Certification of the American Society for Clinical Pathology. Employment opportunities include laboratories in hospitals, medical offices, industry, and research facilities.

College of The Albemarle is accredited by the National Accrediting Agency for Clinical Laboratory Science (5600 N. River Rd., Suite 720, Rosemont, IL 60018; Telephone 773-714- 8880). As a result of NAACLS accreditation, graduates will be eligible to take the American Society of Clinical Pathology Board of Certification exam, or another certifying exam, to become national certified as a Medical Laboratory Technician/Clinical Laboratory Technician.

Student Learning Outcomes – Upon completion of the program, students will:

1. Perform routine clinical laboratory tests as the primary analyst making specimen-oriented decisions on predetermined criteria, including a working knowledge of critical values.
2. Exhibit the ability to problem-solve and trouble-shoot at a level appropriate for an entry-level MLT
3. Perform, develop, evaluate, correlate, assure accuracy and validity of laboratory information and collaborate in the diagnosis and treatment of patients.
4. Exhibit communication skills that extend to consultative interactions with members of the healthcare team, external relations, customer service, and patient education.
5. Demonstrate ethical and moral attitudes and principles that are necessary for gaining and maintaining patient confidentiality.

Partnership: College of The Albemarle has an articulation agreement with Old Dominion University. This allows COA MLT graduates to apply to the online ODU BS degree Medical Laboratory Science program. Successful applicants will be admitted for the BSMLS online degree completion program provisionally, contingent upon the passing of the ASCP Medical Laboratory Technician certification exam.

Partnership: Instructional Service Agreement between COA and Pitt Community College. Through this ISA agreement, students may earn General Education courses at Pitt for transfer to COA's Medical Laboratory Technology program. Pitt Community College students must meet all COA admission and program requirements. Contact <https://pittcc.edu/> or contact Health Sciences Admissions at 252-493-7473 or hltsadm@email.pittcc.edu.

For COA - contact <https://www.albemarle.edu/programs-classes/credit/programs-of-study/medical-laboratory-technology/> or contact Health Sciences admissions at <https://www.albemarle.edu/student-resources/advising/health-sciences/>.

Some Health Sciences and Wellness Programs may have additional requirements related to required GPAs, grades, and other progression policies required for graduation. Please see program handbooks for more information.

A 45 42 0 Medical Laboratory Technology – A.A.S.

First Year Spring Semester Course Number and Title	Pre-Requisites and Co-Requisites	Class Hours	Lab Hours	Clinical Hours	Total Contact Hours	Total Credit Hours
MAT 143 Quantitative Literacy OR MAT 152 Statistical Methods I	Pre-Requisites: MAT 003 Tier 1 and ENG 002 Tier 1 Co-Requisites for MAT 143: MAT 043 Pre-Requisites: MAT 003 Tier 2 and ENG 002 Tier 1	2-3	2		4-5	3-4
BIO 163 Basic Anatomy & Physiology (BIO 168 & BIO 169 will be accepted-must take both)	Pre-Requisites: ENG 002 Tier 1, and either BIO 090 or high school biology	4	2		6	5
ENG 111 Writing and Inquiry	P=ENG 002 Tier 1 C=ENG 011	3			3	3
MLT 110 Intro to MLT	Pre-Requisites: Admission into the MLT program	2	3		5	3
MLT 111 Urinalysis	Pre-Requisites: MLT 110 Co-Requisites: MLT 130	1	3		4	2
MLT 130 Clinical Chemistry	Pre-Requisites: MLT 110 Co-Requisites: MLT 111	3	3		6	4
TOTAL SEMESTER HOURS		15-16	13		28-29	20-21
First Year Summer Semester Course Number and Title	Pre-Requisites and Co-Requisites	Class Hours	Lab Hours	Clinical Hours	Total Contact Hours	Total Credit Hours
CHM 130 Gen., Organic, & Biochemistry	Pre-Requisites: CHM 090 or one unit of HS chemistry Co-Requisites: CHM 130A	3			3	3
CHM 130A G., Organic, & Biochemistry Lab (CHM 151 and 152 will be accepted – must take both)	Pre-Requisites: CHM 090 or one unit of HS chemistry Co-Requisites: CHM 130	0	2		2	1
MLT 120 Hematology/Hemostasis I	Pre-Requisites: MLT 110; BIO 163 or BIO 168 and 169 Co-Requisites: MLT 220	3	3		6	4
MLT 220 Hematology/Hemostasis II	Pre-Requisites: MLT 110; BIO 163, or BIO 168 and 169 Co-Requisites: MLT 120	2	3		5	3
TOTAL SEMESTER HOURS		8	8		16	11

First Year Fall Semester Course Number and Title	Pre-Requisites and Co-Requisites	Class Hours	Lab Hours	Clinical Hours	Total Contact Hours	Total Credit Hours
ENG 112 Writing/Research in the Disciplines	Pre-Requisites: ENG 111	3			3	3
PSY 150 General Psychology	Pre-Requisites: ENG 002 Tier 1	3			3	3
CIS 111 Basic PC Literacy or CIS 110 Intro to Computers	Pre-Requisites for CIS 111: None Pre-Requisites for CIS 110: ENG 002 Tier 1 and MAT 003 Tier 1	1-2	2		3-4	2-3
MLT 125 Immunohematology I	Pre-Requisites: MLT 111, MLT 120, MLT 130, MLT 220; BIO 163, or BIO168 and 169	4	3		7	5
MLT 140 Intro to Microbiology	Pre-Requisites: MLT 111, MLT 120, MLT 130, MLT 220; BIO 163, or BIO168 and 169	2	3		5	3
MLT 240 Special Clinical Microbiology	Pre-Requisites: MLT 111, MLT 120, MLT 130, MLT 140, MLT 220; BIO 163, or BIO 168 and 169 Co-Requisite: MLT 140	2	3		5	3
TOTAL SEMESTER HOURS		15-16	11		26-27	19-20
Second Year Spring Semester Course Number and Title	Pre-Requisites and Co-Requisites	Class Hours	Lab Hours	Clinical Hours	Total Contact Hours	Total Credit Hours
Humanities/Fine Arts Elective (Cannot be a COM course or a foreign language course)	Pre-Requisites: Varies	3			3	3
MLT 285 MLT Practicum II	Pre-Requisites: Completion of all MLT modules Co-Requisites: MLT 215			39	39	13
MLT 215 Professional Issues	Pre-Requisites: Completion of all MLT modules Co-Requisites: MLT 285	1			1	1
TOTAL SEMESTER HOURS		4		39	43	17
TOTAL SEMESTER HOURS REQUIRED FOR ASSOCIATE DEGREE						67-69