Associate of Applied Science Degree in Medical Laboratory Technology

PURPOSE: The Associate of Applied Science Degree in Medical Laboratory Technology (AAS MLT Program) at Lord Fairfax Community College (LFCC) is designed to prepare students to master entry level Medical Laboratory Technology knowledge. The program combines the use of sophisticated instruments and techniques with the application of theoretical knowledge to perform complex procedures on tissue specimens, blood specimens, and other body fluids. The tests and procedures that Medical Laboratory Technologists perform provide critical information enabling physicians to diagnose, treat, and monitor a patient's condition. Upon satisfactory completion of this program, the student will be eligible to take a national board examination, such as American Society for Clinical Pathology (ASCP). Opportunities for the entry level MLT include employment in a myriad of health care settings.

ADMISSION REQUIREMENTS: Acceptance into the AAS Medical Laboratory Technology program is selective and competitive. Submission of an application does not guarantee acceptance into the AAS program. Applicants not selected for the program must complete and resubmit a new application packet each year. Applicants for the AAS program are selected one time per academic year. Deadline for submitting completed applications is May 1 for the upcoming academic year. Applicants are responsible for making certain that the following have been submitted to the Medical Laboratory Technology Program Director:

1. Official transcripts from all colleges attended (transcripts from LFCC or other Virginia Community Colleges are not required)
2. Must have applied to Lord Fairfax Community College
3. Official transcripts showing completion of a high school diploma or records showing completion of GED with scores,
4. A current Medical Laboratory Technology application form.

Early admission is encouraged for advising purposes. Applicants will be notified of their program admission status in June.

Additional Admission Requirements:

1. One unit of high school Biology; or college equivalents/(BIO 101).
2. LFCC placement tests (if required) and completion of any developmental work that may be identified by the placement test.
   - Applicants must receive an ENG 111 placement test recommendation or have successfully completed all developmental English requirements
   - Applicants who do not demonstrate proficiency on the placement test in the following mathematical units will be required to complete developmental courses or their credit equivalent: MTE 1-9
3. A GPA of 2.5 or higher based on the twelve most recent college credits completed by the end of fall semester prior to submitting an MLT application. A GPA lower than 2.5 will be considered on a case-by-case basis.
4. Completion of the pre-requisite courses, or equivalent, noted in the course curriculum. Students who are currently enrolled in the prerequisites may apply; acceptance into the program will be contingent upon passing the courses with a "C" or better prior to beginning the MLT program curriculum.
5. Meet certain computer competencies or successfully complete ITE 115 prior to entering the MLT program.
6. Two completed reference forms – one personal and one professional reference – included in application packet.

Successful completion of the required 68 credits with a minimum grade of "C" in all general education and a "C" in all MDL Medical Laboratory Technology courses is required for the AAS degree.

AAS MLT Course Curriculum

Admission Requirements:

Must be completed with a "C" to apply to AAS program.

SDV 100/101	College Success Skills	1hr lecture	1cr.
BIO 141	Human Anatomy and Physiology I	3hr lecture/3hr lab	4cr.
BIO 142	Human Anatomy and Physiology II	3hr lecture/3hr lab	4cr.
ENG 111	College Composition I	3hr lecture	3cr.
	TOTAL		12 credits

Fall Semester:

Acceptance into the AAS program is required to enroll in MDL courses.

MDL 101	Introduction to Medical Laboratory Techniques	2hr lecture/3hr lab	3cr.
CHM 111	General Chemistry I	3hr lecture/3hr lab	4cr.
MDL 110	Urinalysis and Body Fluids	2hr lecture/3hr lab	3cr.
MDL 210	Immunology and Serology	1hr lecture/3hr lab	2cr.
MDL 105	Phlebotomy	3hr lecture	3cr.
		TOTAL	15 credits

Spring Semester:

MDL 125	Clinical Hematology I	2hr lecture/3hr lab	3cr.
MDL 216	Blood Banking	2hr lecture/3hr lab	3cr.
BIO 150	Introductory Microbiology	3hr lecture/3hr lab	4cr.
PHI 220	Ethics	3hr lecture	3cr.
		TOTAL	13 credits

Fall Semester:

Completion of all prior MDL courses with grade of "C" or better to enroll in second year MDL courses.

MDL 261	Clinical Chemistry and Instrumentation I	3hr lecture/3hr lab	4cr.
MDL 252	Clinical Microbiology II	2hr lecture/3hr lab	3cr.
MDL 225	Clinical Hematology II	2hr lecture/3hr lab	3cr.
PSY 200	Principles of Psychology	3hr lecture	3cr.
		TOTAL	13 credits

Spring Semester:

Completion of all previous MDL courses with grade of "C" or better to enroll in Clinical Rotation semester of the MLT program.

MDL 290*	Coordinated Internship in Clinical Chemistry	0hr lecture/8hr lab	2cr.
MDL 290*	Coordinated Internship in Hematology	0hr lecture/8hr lab	2cr.
MDL 290*	Coordinated Internship in Blood Bank	0hr lecture/8hr lab	2cr.
MDL 290*	Coordinated Internship in Microbiology	0hr lecture/8hr lab	2cr.
MDL 281	Clinical Correlations	1hr lecture	1cr.
		TOTAL	9 credits

Total minimum credits for AAS Degree in Medical Laboratory Technology 68 credits

*The Coordinated Internships (MDL 290) will consist of 375 clinical hours, rotating throughout different departments in a predetermined Clinical Laboratory. The students will spend 3 weeks in Chemistry (4 days a week, 7 hour days), 3 weeks in Hematology (4 days a week, 7 hour days), 4 weeks in Microbiology (4 days a week, 7 hour days), and 4 weeks in Blood Bank (4 days a week, 7 hour days). Serology, Coagulation, and Urinalysis clinical hours will be incorporated in the four mentioned departments. Students will be allotted a 30 minute break each day of their clinical rotation. Credit/Practice ratio will not exceed 1:5 hours. This is a pass/unsatisfactory course. Students who do not complete 375 hours will not pass the course. Successful completion of this course is mandatory in earning the AAS degree.

CLINICAL REQUIREMENTS: During the final semester, students will enter the field for a 14 week clinical rotation. Medical laboratory personnel frequently work with blood and body fluids which may harbor infectious diseases such as bacteria and viruses. Students may likewise be exposed to potentially infectious blood borne disease as well as bacterial and viral cultures in the clinical microbiology laboratory due to time pressures placed on the laboratory personnel.

Prior to admission to the Clinical Rotation:
1. Students must be 18 years of age.
2. Clinical experience will be provided in the final semester of the program in affiliated hospitals or laboratories. Students must purchase required apparel before the start of clinical rotations.
3. Students must provide their own form of transportation to and from the clinical sites.
4. Graduation from high school or satisfactory completion of the certificate of general education development (GED or equivalent); official copy required.
5. Current immunization record to include Td/Tdap, MMR, Varicella, PPD, Bacterial meningitis, Polio, Influenza and Hepatitis series.
6. Physical exam form completed within the last 6 months signed by a M.D. or D.O and student health history form.
7. Proof of health insurance.
8. Results of Criminal Background Check and Urine Drug Screen completed within ninety days and submitted forty-five (45) days prior to entering Clinical rotation. The cost of the background check and the drug screen are the responsibility of the student.
9. Sign an agreement which releases all clinical agencies and their employees, Lord Fairfax Community College, The Virginia Community College System and the Commonwealth of Virginia from any liability for any injury or death to the student or damage to his/her property arising out of agreement of use of facilities associated with the nursing program.