

The MLT Curriculum (71 credits)

General Education Requirements

Communications (6 credits)

ENGL 110 Comp I: Exposition	3cr
ENGL 120 Comp II: Analysis & Argument OR	
CJ 221 Interpersonal Communication	3cr

Fine Arts/Humanities (3 credits)

For required courses, refer to the UNM Core Curriculum

Mathematics/Physical and Natural Sciences (11 credits)

Choose from STAT 145, MATH 150 or MATH 121	3cr
CHEM 121/123L or CHEM 111/111L	4cr
CHEM 122/124L or CHEM 212	4cr

Biology (8 credits)

Choose from BIOL 123/124L, BIOL 136/139L, or BIOL 237/227L
Choose from BIOL 200 or BIOL 238/237L

Social and Behavioral Sciences (6 credits)

For required courses, refer to the UNM Core Curriculum

Health/Physical Education (2 credits)

Health Sciences (1 credit)

HCHS 101 Phlebotomy	1cr
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Medical Laboratory Technology Core (34 Credits):

MLT 111 Intro to Basic Laboratory Skills, Urinalysis and Body Fluids	4cr
MLT 112 Clinical Practicum: Phlebotomy	1cr
MLT 211 Clinical Hematology & Coagulation	4cr
MLT 214 Clinical Microbiology	5cr
MLT 216 Clinical Chemistry	4cr
MLT 219 Immunohematology and Serology	4cr
MLT 271 Directed Clinical Practicum I	4cr
MLT 281 Directed Clinical Practicum II	6cr
MLT 291 Preparation for MLT Board Exam	2cr

Suggested Course Sequence

The following is the recommended course sequence for full-time students who met the prerequisites for the required courses. Part-time students should see the MLT program coordinator to customize their educational plan.

Term 1 (13cr)

ENGL 110	3cr
MATH 121	3cr
BIOL 123/124L or 136/139L or 237/227L	4cr
Behavioral/Social Sciences course	3cr

Term 2 (12cr)

ENGL 120 or CJ 221	3cr
CHEM 121/123L or 111/111L or 122/124L	4cr
BIOL 200 or BIOL 238/237L	4cr
HCHS 101	1cr

Term 3 (12cr)

CHEM 212	4cr
Behavioral/Social Sciences course	3cr
Fine Arts/Humanities course	3cr
Health/Physical Education	2cr

Term 4 (13cr)

MLT 111 Intro to Basic Lab Skills, Urinalysis and Body Fluids	4cr
MLT 214 Clinical Microbiology	5cr
MLT 216 Clinical Chemistry	4cr

Term 5 (8cr)

MLT 211 Clinical Hematology & Coagulation	4cr
MLT 219 Immunohematology and Serology	4cr

Term 6 Capstone Courses (13cr)

MLT 112 Clinical Practicum: Phlebotomy	1cr
MLT 271 Directed Clinical Practicum I	4cr
MLT 281 Directed Clinical Practicum II	6cr
MLT 291 Preparation for MLT Board Exam	2cr

Notes:

1. English, Math, Chemistry and Biology courses must be taken in sequence. Please note that there may be prerequisites to these courses that are not in the MLT curriculum.
2. Interested students MUST apply to the MLT Program. General education prerequisite courses must be preferably completed prior to admission. A grade of C or better is required in all courses. **Deadline for submission of application to the MLT Program is June 1st for fall admissions and October 1st for spring admissions.** Students are admitted each regular semester based on **selection criteria**. Class size is limited to twelve. Priority is given to continuing students who are in good academic standing. Students are required to complete all professional coursework **within a five-year time period**.

Course Descriptions

MLT 111 Introduction to Basic Laboratory Skills, Urinalysis, and Body Fluids (4)

An introduction to the profession of medical diagnostic testing and the clinical laboratory. Content areas consist of: general laboratory safety, laboratory mathematics, general instrumentation, use of the microscope, urinalysis, and body fluids. Pre-/co-requisites: ENGL 101, MATH 119 or 122, and MLT 211 or consent of the instructor. Students are required to co-enroll in MLT 211 – Clinical Hematology and Coagulation. Prerequisite Validation: English and Mathematics competency are essential for the student to master the MLT core curriculum and progress toward the Associate of Science Degree.

MLT 112 Clinical Practicum: Phlebotomy (1)

Supervised clinical practice in the clinical pathology department of affiliated hospitals. Field laboratory experience in blood sample collection and processing that includes both Venipuncture and capillary puncture techniques. Pre/co-requisites: HCHS 101 and MLT 111 or permission of instructor.

MLT 211 Clinical Hematology and Coagulation (4)

Introduction to the theory and practice of clinical hematology. The course includes: erythropoiesis, leukopoiesis, cell enumeration, the hemogram, white blood cell morphology, differentials, coagulation testing, platelets, routine manual and automated methods, and correlation with pathologies.

MLT 214 Clinical Microbiology (5)

Comprehensive current clinical study of bacteriology, mycology, and parasitology; macroscopic and microscopic identification; biochemical identification profiles; bacterial antibiotic susceptibility patterns; parasitic life cycles. Pathology and epidemiology. Introduction to rickettsias and viruses. Prerequisites: MLT 111 and MLT 211.

MLT 216 Clinical Chemistry (4)

Theory, principles and procedures applicable to clinical chemistry. Focus on chemical analysis of blood and other body fluids using manual and automated techniques. Application to tests in the diagnosis of disease with review of abnormal physiology. Prerequisites: 111, 214, MATH 111 or 121, CHEM111 or 121.

MLT 219 Immunohematology and Serology (4)

Principles, procedures, and pathology for serology. Routine and advanced test procedures to identify and enumerate antibodies. Principles and procedures in Blood Banking. Introduction to genetics. Processing blood components for compatibility testing. Regulation dictated by AABB and FDA. Pre-/co-requisites: 111, 116, 214, 216, Math 121.

MLT 271 Directed Clinical Practicum I (4)

Supervised clinical practice in the clinical pathology department of affiliated hospitals. Field laboratory experience includes rotations through urinalysis, hematology, and chemistry. Prerequisites: 111, 116, and 214.

MLT 281 Directed Clinical Practicum II (6)

Continuation of MLT 271. Supervised clinical practice in the clinical pathology department of affiliated hospitals. Field laboratory experience includes rotations through blood bank, microbiology, advanced hematology, and serology.

MLT 291 Preparation for MLT Board Examinations (2)

Designed to integrate theory with MLT directed clinical practicum. A comprehensive and current review supplemented by reading assignments and questions on the following subjects: sample collection, coagulations, chemistry, microbiology, blood banking, serology, urinalysis, and calculations. Pre-/co- requisites: Students must have completed MLT 111, 112, 211, 214, 216, 219 and be concurrently enrolled in either MLT 271 or MLT 281.