Medical Laboratory Sciences

The following matrix indicates those courses deemed transferable among institutions listed across the top of the matrix. The numbers on the matrix represent the number of semester hours associated with the course at each institution and which institutions have agreed to transfer the commonly numbered course in each row.

You can view the group leaders at the bottom of the page. If you are interested in printing this page, please note that it is best to print in landscape mode.

Prefix	Number	Gerta	Course Title	BSC	MASU	NDSU	UND
MLS	101		Intro to Medical Laboratory Science	1			2
MLS	103		Phlebotomy	3			
MLS	104		Phlebotomy Internship	8			
MLS	111		Introduction to Medical Laboratory Science			1	
MLS	201		Immunology	4			
MLS	205		Clinical Internship I	1			
MLS	215		Clinical Internship II	2			
MLS	225/L--325/L		Hematology/Lab	3	3/1		2
MLS	235/L		Clinical Chemistry I/Lab	3			
MLS	240		Immunohematology	3			
MLS	245		Clinical Microbiology I	3			
MLS	255		Clinical Internship III	12			

MLS 101 Intro to Medical Laboratory Science
An introduction to the medical laboratory sciences and the professions of clinical laboratory science. Professional ethics, medical terminology, laboratory safety, the use and care of basic laboratory equipment, routine urinalysis, and identification of ova and parasites. Note: Contingent on agreement from course professors at both campuses.

MLS 103 Phlebotomy
Phlebotomy is the "art of drawing blood". The course consists of a knowledge component to include: anatomy of hand, arm, foot and blood vessels; blood vessels; blood composition, specimen types, and coagulation factors. The motor skills component will include instruction in manual phlebotomy techniques, and drawing and handling specimens. The attitude component discusses the public relations aspect of the job and job applications. Open to all students.

MLS 104 Phlebotomy Internship
The internship provides a supervised rotation of no less than 160 hours in the phlebotomy section of the affiliated clinical laboratory. Prerequisites: acceptance into the Phlebotomy Technician program, MLS 103.

MLS 111 Introduction to Clinical Laboratory Science
Introduction to the clinical laboratory science profession. Lectures, discussions, and field trips focus on professional traits and communication, ethical behavior of the health care provider, major curriculum requirements, and scope of practice in the profession.

MLS 201 Immunology
The foundations of diagnostic serology, immunohematology, histocompatibility and hematology as well as new technology such as monoclonal antibodies and molecular biology are covered in order for students to become better prepared for a career in laboratory medicine. Prerequisites: General Biology 150-151 or equivalent, CHEM 115, 116 or 121, 122 strongly recommended. Open to all students.

MLS 205 Clinical Internship I
Supervised rotation in blood drawing and the clinical microscopy department for the clinical affiliate. Prerequisites: MLS 101, 225, and 245.

MLS 215 Clinical Internship II
Supervised experience in the hematology, chemistry, microbiology and blood banking departments of the affiliated clinical laboratory. Prerequisites: MLS 101, 225, 235, and 245.

MLS 225/L--325/L Hematology/Lab
Identification of normal and abnormal blood cells in various hematological disorders. Theory and application of hematology procedures. Morphologic examination of blood and marrow and laboratory testing used in hematological study.

MLS 235/L Clinical Chemistry I/Lab
Lecture and laboratory. Principles of instrumentation and the theory and application of the biochemical tests performed in the clinical laboratory. The student will receive instruction in the basic techniques required for performing routing manual determinations. Prerequisites exist.

MLS 240 Immunohematology
Lecture and laboratory. Fundamental principles of immunology are presented and applied to serology and blood banking. Donor selection, blood collection and processing, blood components. Preparation and administration of blood and genetics of blood group inheritance. Theory of blood coagulation and routine procedures. Prerequisites: MLS 101, 225.

MLS 245 Clinical Microbiology I
The morphology, cultured characteristics and identification of bacteria pathogenic to man and their role in infectious disease are discussed, as well as antibiotics susceptibility testing and rapid identification systems.

MLS 255 Clinical Internship III
Supervised experience in the hematology, chemistry, microbiology, and blood banking departments of the affiliated clinical laboratory. Prerequisites: All MLS courses.

The following individuals are leaders for this discipline. Those marked with an asterisk (*) are chairs.

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