

Bachelor of Science in Medical Laboratory Science

Required 122 credit hours (36 of which must be numbered 300 or above) including:

I. Essential Studies Requirements (see University ES listing)

Note that some UND ES requirements are met with certain pre-professional and professional program courses.

II. Pre-Professional Program Courses

Required Pre-Professional Courses

Code	Title	Credits
BIOL 150	General Biology I	3
BIOL 150L	General Biology I Laboratory	1
BIOL 151	General Biology II	3
BIMD 220	Human Anatomy Physiology I	3
BIMD 221	Human Anatomy Physiology II	3
BIMD 301	Biochemistry	3
CHEM 121	General Chemistry I	3
CHEM 121L	General Chemistry I Laboratory	1
CHEM 122	General Chemistry II	3
CHEM 122L	General Chemistry II Laboratory	1
COMM 110	Fundamentals of Public Speaking	3
ECON 210	Introduction to Business and Economic Statistics	3-4
or PSYC 241	Statistics for the Behavioral Sciences	
or SOC 326	Sociological Statistics	
ENGL 110	College Composition I	3
ENGL 130	Composition II: Writing for Public Audiences	3
MATH 103	College Algebra	3-4
or MATH 107	Precalculus	
or MATH 146	Applied Calculus I	
or MATH 165	Calculus I	
MLS 110	Introduction to Medical Laboratory Science	2
MLS 220	Introduction to Clinical Laboratory Operations	2
MLS 226	Introduction to Clinical Immunology	3
MLS 332	Introduction to Clinical Hematology	3
MLS 334	Introduction to Clinical Microbiology	3
MLS 339	Introduction to Evidence Based Practice	3
MLS 340	Introduction to Molecular Diagnostics	1

Required Science Elective Courses

Two of the following courses (or equivalents) are required.

Notes: Some of these courses may have additional pre-requisite requirements beyond what is required for MLS; Some required MLS pre-professional courses may require a course from this list as a pre-requisite.

Code	Title	Credits
BIMD 202	Introduction to Medical Microbiology Lecture	3
BIMD 302	General Microbiology Lecture	2
BIOL 315	Genetics	3
BIOL 341	Cell Biology	3
BIOL 410	Molecular Biology Techniques	4
CHEM 333	Analytical Chemistry	3

CHEM 340	Survey of Organic Chemistry	4
CHEM 341	Organic Chemistry I	3
Other Advisor-Approved Science Course		3-4

Optional Recommended Pre-Professional Courses

Code	Title	Credits
PHE 101	Introduction to Public Health	3
PSYC 111	Introduction to Psychology	3
SOC 110	Introduction to Sociology	3

III. MLS Professional Program Required Courses

Students must apply and be accepted to the MLS Professional Program before beginning MLS Professional Program coursework.

Code	Title	Credits
MLS 411	Clinical Chemistry I	2
MLS 412	Clinical Hematology Hemostasis I	3
MLS 413	Clinical Immunohematology I	2
MLS 414	Clinical Microbiology I	3
MLS 415	Clinical Urinalysis Body Fluids I	2
MLS 416	Clinical Immunology Molecular Diagnostics	1
MLS 420	Clinical Laboratory Operations	2
MLS 421	Clinical Chemistry II	2
MLS 422	Clinical Hematology Hemostasis II	3
MLS 423	Clinical Immunohematology II	2
MLS 424	Clinical Microbiology II	3
MLS 425	Clinical Urinalysis Body Fluids II	2
MLS 431	Clinical Chemistry Urinalysis III	2
MLS 432	Clinical Hematology Hemostasis III	2
MLS 433	Clinical Immunohematology III	2
MLS 434	Clinical Microbiology III	2
MLS 449	Capstone in Medical Laboratory Science	3
MLS 450	Advanced Clinical Applications in Medical Laboratory Science	1
Total Credits		39