

B.S. Medical Laboratory Science 4+1 SML9 Degree

This is not an official list of degree requirements. Adjustments may be required due to curriculum changes.

First Year

Fall

Course	Prerequisite	Credit
UN 1015 Composition		3
Math 2720 Statistical Methods	Yes	4
BL 1710 Medical Terminology		1
Essential Education: Michigan Tech Seminar BL 1600		1
Essential Education: Foundations of the Human World		3
CH 1150 University Chem I	Yes	3
CH 1151 University Chem Lab 1	Yes	1
Total		16

Spring

Course	Prerequisite	Credit
BL 1200 General Biology II		3
BL 1210 General Biology II Lab		1
CH 1160 University Chemistry II	Yes	3
CH 1161 University Chemistry II Lab	Yes	1
Essential Education: Shape Elective		3
Essential Education: Arts and Culture		3
Essential Education: Activities for Well-being and Success		1
Total		15

Second Year

Fall

Course	Prerequisite	Credit
BL 2410 Basic Medical Laboratory Techniques	Yes	3
CH 2410 Organic Chemistry I	Yes	3
BL 2010 Anatomy and Physiology I	Yes	3
BL 2011 Anatomy and Physiology I Lab	Yes	1
Essential Education: Communication Intensive		3
Essential Education: Activities for Well-being and Success		1
Total		14

Spring

Course	Prerequisite	Credit
BL 2200 Genetics	Yes	3
BL 2020 Anatomy and Physiology II	Yes	3
BL 2021 Anatomy and Physiology II Lab	Yes	1
Essential Education: Shape Elective from MLS Concentration List		3
MLS Concentration Choice	Variable	3
Essential Education: Activities for Well-being and Success		1
Total		14

Third Year

Fall

Course	Prerequisite	Credit
BL 3210 General Microbiology	Yes	4
BL 3640 General Immunology	Yes	3
BL 3900 Urinalysis and Body Fluids	Yes	1
PH 1110 College Physics I	Yes	3
PH 1111 College Physics I Lab	Yes	1
Essential Education: Intercultural Competency		3
Total		15

Spring

Course	Prerequisite	Credit
BL 3600 Clinical Practicum and Career Prep		1
BL 3230 Medical Bacteriology	Yes	5
BL3800 Mycology, Virology, Parasitology	Yes	2
PH 1210 College Physics II	Yes	3
PH 1200 College Physics by Inquiry II	Yes	1
Essential Education: Experience		3
Total		15

Fourth Year

Fall

Course	Prerequisite	Credit
BL 3025 Biochemistry for Health Professions	Yes	3
BL 4640 Clinical Immunology and Serology	Yes	3
BL 4720 Hematology and Hemostasis	Yes	4
BL 4725 Immunohematology	Yes	3
Free Elective		3
Total		16

Spring

Course	Prerequisite	Credit
BL 3611 Phlebotomy	Yes	1
BL 4550 Clinical Chemistry	Yes	4
BL 4800 Molecular Diagnostics	Yes	4
BL 4980 MLS Core Concept Integration	Yes	2
Free Elective		3
Free Elective		1
Total		15

Grand Total = 120 Credits

Total Credits Required for University Practicum Route: 132 (120 + 12 credits BL4612- University Practicum)

For 2026 – 2027

Revised 06/24/2026