

**MEDICAL LABORATORY SCIENCE**  
**Bachelor of Health Science (B.H.S.)**  
**2023-2024**

**Requirements for Major: 43 credit hours in the department, including:**

CL 407 Clinical Laboratory Operations
CL 408 Introduction to Clinical Hematology
CL 409 Introduction to Clinical Microbiology
CL 410 Introduction to Clinical Chemistry & Urinalysis
CL 411 Introduction to Clinical Immunohematology
CL 412 Clinical Laboratory Science Theory, Application & Correlation
CL 413 Clinical Endocrinology & Toxicology
CL 414 Clinical Chemistry and Urinalysis I
CL 415 Clinical Chemistry & Urinalysis II
CL 416 Clinical Hematology I
CL 417 Clinical Hematology II
CL 418 Clinical Microbiology I
CL 419 Clinical Microbiology II
CL 420 Clinical Immunology & Molecular Diagnostics
CL 422 Clinical Immunohematology I
CL 423 Clinical Immunohematology II
CL 430 Clinical Laboratory Management I
CL 431 Clinical Laboratory Management II
CL 442 Clinical Immunohematology Laboratory Practicum I
CL 443 Clinical Immunohematology Laboratory Practicum II
CL 444 Clinical Core Laboratory Practicum I
CL 445 Clinical Core Laboratory Practicum II
CL 448 Clinical Microbiology Laboratory Practicum I
CL 449 Clinical Microbiology Laboratory Practicum II

**Correlated courses (36 credit hours) – In consultation with a departmental advisor, select:**

BI 102 Cell Biology
BI 255 Physiology
BI 301 General Microbiology
BI 333 General Genetics OR
BI 354 Molecular Biology Lab
BI 362 Immunology
CH 151 Fundamentals of Chemistry I
CH 152 Fundamentals of Chemistry II
CH 340 Organic Chemistry I
<b>Choose one additional chemistry class from below:</b>
CH 341 Organic Chemistry II
CH 320 Analytical Chemistry
CH 350 Biochemistry

**General Education Requirements (BHS):**

Humanities (9) (GEHU/GECPA) (Max 6 hours/ discipline)	Course Number	Social Sciences (9) (GESS) (Max 6 hours/ discipline)	Course Number	Natural Sciences/ Mathematics (9) (GENS) (Max 8 Hours or 2 Courses/ Discipline)	Course Number
Fine Arts (3)		Soc. Science 1 (3)		Nat. Science 1 (3-5)	
Humanities 1 (3)		Soc. Science 2 (3)		Nat. Science 2 (3-5)	
Humanities 2 (3)		Soc. Science 3 (3)		Nat. Science 3 (3-5)	

**Core University/BHS-Specific Requirements:**

WU 101 (3)*		Total Hours (120)	
EN 101 (3)		Upper Division (300 and above) (45)	
EN 300 (3)		>= 2.0 Major Cumulative GPA	
MA 116 (3)**		>= 2.0 Overall Cumulative GPA	

*\*Students transferring with 30 or more credit hours completed at an accredited post-secondary institution (after graduating from High School) with a GPA of 2.0 or higher are exempt from this requirement*

*\*\*May be waived if student successfully completes a higher-level mathematics course with a grade of C or higher or if a student presents an ACT score in mathematics of at least 28 (SAT of at least 660)*

**Sample 4-Year Schedule for Medical Laboratory Science Major  
Bachelor of Health Science  
120 Hours**

Curriculum for students starting 2023-2024 Academic Year  
Students starting in different academic years should contact their advisor.

<b>Freshman</b>			
<b>Fall Semester</b>		<b>Spring Semester</b>	
CH 151 – Fundamentals of Chemistry I	5	CH 152 – Fundamentals of Chemistry II	5
MA 116 – College Algebra	3	BI 102 – General Cellular Biology	5
WU 101 – The Washburn Experience	3	Soc. Sci. General Education	3
EN 101 – First Year Writing	3		
<b>TOTAL</b>	<b>14</b>	<b>TOTAL</b>	<b>13</b>
<b>Sophomore</b>			
<b>Fall Semester</b>		<b>Spring Semester</b>	
CH 340 – Organic Chemistry	3	Chemistry Elective (CH 320, CH 341, or CH 350)	3
BI 255 – Human Physiology	4	BI 301 – General Microbiology	4
MA 140 – Statistics (elective)	3	Soc. Sci. General Education	3
CN 150 – Public Speaking	3	AR/MU/TH General Education	3
<b>TOTAL</b>	<b>13</b>	<b>TOTAL</b>	<b>13</b>
<b>Junior</b>			
<b>Fall Semester</b>		<b>Spring Semester</b>	
BI 333 – General Genetics	4	BI 362 – Immunology	3
EN 300 – Advanced College Writing	3	AL 320 – Human Disease (elective)	3
AL 101 – Fd. of Healthcare (elective)	3	Soc. Sci. General Education	3
Upper/Lower Div. Electives	2	Humanities General Education	3
<b>TOTAL</b>	<b>12</b>	<b>TOTAL</b>	<b>12</b>
<b>Senior</b>			
<b>May – August (Student Laboratory)</b>		<b>August – November (Clinical Rotation I)</b>	
CL 407 – Clin Lab Operations	2	CL 413 – Clin. Endocrinology & Toxicology	1
CL 408 – Intro To Clinical Hematology	2	CL 414 – Clinical Chemistry I & Urinalysis I	2
CL 409 – Intro to Clinical Microbiology	2	CL 416 – Clinical Hematology I	2
CL 410 – Intro to Clin. Chem. Urinalysis	1	CL 418 – Clinical Microbiology I	2
CL 411 – Intro to Clinical Immunohematology I	1	CL 420 – Clin. Immunology & Molecular Diagnostics	2
		CL 422 – Clinical Immunohematology I	2
		CL 430 – Clinical Laboratory Management I	2
		CL 442 – Clinical Immunohematology Lab Practicum I	1
		CL 444 – Clinical Core Lab Practicum I	1
		CL 448 – Clin. Microbiology Lab Practicum I	1
<b>TOTAL</b>	<b>8</b>	<b>TOTAL</b>	<b>16</b>

<b>November – May (Clinical Rotation II)</b>			
CL 412 – Clin. Lab. Science Theory, Application & Correlation	5		
CL 415 – Clin. Chemistry & Urinalysis II	2		
CL 417 – Clinical Hematology II	2		
CL 419 – Clinical Microbiology II	2		
CL 423 – Clinical Immunohematology II	2		
CL 431 – Clin. Lab. Management II	3		
CL 443 - Clinical Immunohematology Laboratory Practicum II	1		
CL 445 – Clinical Core Laboratory Practicum II	1		
CL 449 – Clin. Microbiology Practicum II	1		
<b>TOTAL</b>	<b>19</b>		