

**CENTENARY UNIVERSITY**  
**B.S. IN MEDICAL LABORATORY SCIENCE**  
**RECOMMENDED FOUR-YEAR SEQUENCE**  
**2022-2023**

<b>Course #</b>	<b>Title</b>	<b>Pre-co-requisites</b>	<b>Credits</b>	<b>Completed</b>
<b><u>YEAR 1 (FALL)</u></b>				
BIO 1301/1101	General Biology I and Lab		3/1	_____
BIO 1205	Nature of Work in the Sciences		2	_____
CHM 1302/1102	General Chemistry I and Lab	Placement Test, MTH1600	3/1	_____
MTH 1600	Pre-Calculus**	By placement Test	4	_____
CORE	Wellness 1305 (CU Value I)		2	_____
<b><u>YEAR 1 (SPRING)</u></b>				
BIO 2300	Medical Terminology		2	_____
CHM 1303/1103	General Chemistry II and Lab	CHM 1302 (≥C-)	3/1	_____
WRI 1001/2	Composition and Rhetoric	By self-placement	4	_____
CORE	Broad, Enduring Interest		4	_____
COM 2001	Public Speaking		4	_____
<b><u>YEAR 2 (FALL)</u></b>				
BIO 2302/2102	Anatomy & Physiology I and Lab		3/1	_____
CHM 2300/2100	Organic Chemistry I and Lab	CHM 1303 (≥C-)	3/1	_____
MTH 1501	Statistics I (CU Value III)		4	_____
WRI 2200	Intensive Research Writing I	WRI 1001/2	2	_____
<b><u>YEAR 2 (SPRING)</u></b>				
BIO 2303/2103	Anatomy & Physiology II and Lab	BIO 2302 (≥C-)	3/1	_____
BIO 3301/3101	Genetics and Lab	BIO 1301 (≥C-)	3/1	_____
BIO 4300	Bioethics (CU Value IV)	Sophomore standing	4	_____
MLS 2000	Clinical Laboratory Operations	co-req. BIO3500	2	_____
WRI 2210	Intensive Research Writing II	WRI 1001/2	2	_____
<b><u>YEAR 3 (FALL)</u></b>				
BIO 3304/3104	Microbiology and Lab	BIO 1301 (≥C-)	3/1	_____
CHM 4200	Biochemistry	CHM 2300 (≥C-)	4	_____
CORE	Global Culture (CU Value IV)		4	_____
CORE	Creative Expression & Self (CU Value IV)		4	_____
<b><u>YEAR 3 (SPRING)</u></b>				
MLS 3100	Body Fluids	MLS 2000	2	_____
MLS 3201/3101	Hematology I and Lab	MLS 2000	2/1	_____
MLS 3202/3102	Clinical Chemistry I and Lab	MLS 2000	2/1	_____
MLS 4303/4103	Clinical Immunology and Lab	MLS 2000, BIO 3304	3/1	_____
MLS 4600	Molecular Diagnostics	MLS 2000, BIO 3301 or 3300	2	_____
<b><u>YEAR 4 (FALL)</u></b>				
MLS 4201/4101	Hematology II and Lab	MLS 3201	2/1	_____
MLS 4405/4205	Clinical Microbiology and Lab	MLS 2000, BIO 3304	4/2	_____
MLS 4304/4104	Immunohematology and Lab	MLS 4303	3/1	_____
MLS 4202/4102	Clinical Chemistry II and Lab	MLS 3202	2/1	_____
MLS 4800	Clinical Competency Review	MLS 4201, MLS 4202, MLS 4304, MLS 4405	1	_____
<b><u>YEAR 4 (SPRING)</u></b>				
MLS 4000	Lab Management and Education	MLS 2000	2	_____
MLS 4910	Topics in Medical Laboratory Science	MLS Director approval	1	_____
MLS 4920	Clin. Practicum - Hematology	MLS 4800; MLS Director Approval	3	_____
MLS 4930	Clin. Practicum - Chemistry	MLS 4800; MLS Director Approval	3	_____
MLS 4940	Clin. Practicum - Immunohematology	MLS 4800; MLS Director Approval	3	_____
MLS 4950	Clin. Practicum - Microbiology	MLS 4800; MLS Director Approval	3	_____
			<b>Total</b>	<b>126</b>

\*\* Chemistry/math placement test must be taken prior to entry in course

STUDENT NAME: \_\_\_\_\_

DATE: \_\_\_\_\_

**UNIVERSITY CORE REQUIREMENTS** **GRADE****CU Value I: College Transition (8 Credits)**

\_\_\_\_\_ 4CR \_\_\_\_\_

Broad, Enduring Interest

**BIO 1205 Nature of Work in the Sciences** 2CR \_\_\_\_\_

\_\_\_\_\_ 2CR \_\_\_\_\_

Wellness

**CU Value II: Communication (12 Credits)**

Written Communication (Requires C- or Better)

WRI-1001 or WRI-1002 4CR \_\_\_\_\_

WRI 2200 Intensive Research Writing I 2CR \_\_\_\_\_

WRI 2210 Intensive Research Writing II 2CR \_\_\_\_\_

COM 2001 Public Speaking 4CR \_\_\_\_\_

**CU Value III: STEM (8 Credits)**

\*BIO 1301/1101 General Biology I + Lab Major \_\_\_\_\_

\*MTH 1600 Precalculus Major \_\_\_\_\_

**CU Value IV: Community, Citizenship, & Selves (12 Credits)**

\_\_\_\_\_ 4CR \_\_\_\_\_

Global Culture

**BIO 4300 Bioethics** Major \_\_\_\_\_

Community &amp; Responsibility

\_\_\_\_\_ 4CR \_\_\_\_\_

Creative Expression &amp; Self

**MEDICAL LAB SCIENCE PREREQUISITES (50 CR)**

\*BIO 1301 General Biology I 3CR \_\_\_\_\_

\*BIO 1101 General Biology I Lab 1CR \_\_\_\_\_

\*BIO 2302 Anatomy &amp; Physiology I 3CR \_\_\_\_\_

\*BIO 2102 Anatomy &amp; Physiology I Lab 1CR \_\_\_\_\_

\*BIO 2303 Anatomy and Physiology II 3CR \_\_\_\_\_

\*BIO 2103 Anatomy and Physiology II Lab 1CR \_\_\_\_\_

BIO 2300 Medical Terminology 2CR \_\_\_\_\_

BIO 3301 Genetics<sup>†</sup> 3CR \_\_\_\_\_BIO 3101 Genetics Lab<sup>†</sup> 1CR \_\_\_\_\_

BIO 3304 Microbiology 3CR \_\_\_\_\_

BIO 3104 Microbiology Lab 1CR \_\_\_\_\_

BIO 4300 Bioethics (CU Value IV) 4CR \_\_\_\_\_

\*CHM 1302 General Chemistry I 3CR \_\_\_\_\_

\*CHM 1102 General Chemistry I Lab 1CR \_\_\_\_\_

\*CHM 1303 General Chemistry II 3CR \_\_\_\_\_

\*CHM 1103 General Chemistry II Lab 1CR \_\_\_\_\_

\*CHM 2300 Organic Chemistry I 3CR \_\_\_\_\_

\*CHM 2100 Organic Chemistry I Lab 1CR \_\_\_\_\_

CHM 4200 Biochemistry 4CR \_\_\_\_\_

MTH 1501 Statistics I (CU Value III) 4CR \_\_\_\_\_

\*MTH 1600 Precalculus 4CR \_\_\_\_\_

**MEDICAL LAB SCIENCE REQUIREMENTS (48 CR)**

\*MLS 2000 Clinical Laboratory Operations 2CR \_\_\_\_\_

MLS 3100 Body Fluids 2CR \_\_\_\_\_

\*MLS 3201 Hematology I 2CR \_\_\_\_\_

\*MLS 3101 Hematology I Lab 1CR \_\_\_\_\_

MLS 4201 Hematology II 2CR \_\_\_\_\_

MLS 4101 Hematology II Lab 1CR \_\_\_\_\_

\*MLS 3202 Clinical Chemistry I 2CR \_\_\_\_\_

\*MLS 3102 Clinical Chemistry I Lab 1CR \_\_\_\_\_

\*MLS 4202 Clinical Chemistry II 2CR \_\_\_\_\_

\*MLS 4102 Clinical Chemistry II Lab 1CR \_\_\_\_\_

\*MLS 4303 Clinical Immunology 3CR \_\_\_\_\_

\*MLS 4103 Clinical Immunology Lab 1CR \_\_\_\_\_

\*MLS 4304 Immunohematology 3CR \_\_\_\_\_

\*MLS 4104 Immunohematology Lab 1CR \_\_\_\_\_

\*MLS 4405 Clinical Microbiology 4CR \_\_\_\_\_

\*MLS 4205 Clinical Microbiology Lab 2CR \_\_\_\_\_

MLS 4600 Molecular Diagnostics 2CR \_\_\_\_\_

MLS 4000 Lab Management &amp; Education 2CR \_\_\_\_\_

\*MLS 4800 Clinical Competency Review 1CR \_\_\_\_\_

MLS 4910 Topics in Medical Lab. Science 1CR \_\_\_\_\_

\*MLS 4920 Clin. Practicum - Hematology 3CR \_\_\_\_\_

\*MLS 4930 Clin. Practicum - Chemistry 3CR \_\_\_\_\_

\*MLS 4940 Clin. Practicum - Immunohem. 3CR \_\_\_\_\_

\*MLS 4950 Clin. Practicum - Microbiology 3CR \_\_\_\_\_

**TOTAL NUMBER OF CREDITS: 126**

Notes:

- To earn a Bachelor degree, all graduates must successfully complete a minimum of 120 credit hours, major dependent.
- Minimum of 30 credits must be taken at Centenary University.
- All graduates must have a minimum grade point average of 2.0 or above in their major(s) and cumulatively.
- Credits can only be shared between the core and the major or core and minor requirements. Shared credits within the core requirements is not allowed
- \* Must earn C- or better in all MLS courses.**
- <sup>†</sup>BIO 3310/3110 Cellular and Molecular Biology and Lab can be taken in place of BIO 3301/BIO 3101 Genetics to meet the requirements for this degree.