

CENTENARY UNIVERSITY
B.S. IN MEDICAL LABORATORY SCIENCE
RECOMMENDED FOUR-YEAR SEQUENCE
2023-2024

| Course # | Title | Pre-co-requisites | Credits | Completed |
|-------------------------------|------------------------------------------|-------------------------------------------|----------------|------------------|
| <u>YEAR 1 (FALL)</u> | | | | |
| 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 | _____ |
| <u>YEAR 1 (SPRING)</u> | | | | |
| 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 | _____ |
| <u>YEAR 2 (FALL)</u> | | | | |
| 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 | _____ |
| <u>YEAR 2 (SPRING)</u> | | | | |
| 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 | _____ |
| <u>YEAR 3 (FALL)</u> | | | | |
| 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 | _____ |
| <u>YEAR 3 (SPRING)</u> | | | | |
| MLS 3100 | Body Fluids | MLS 2000 | 2 | _____ |
| MLS 3301/3101 | Hematology I and Lab | MLS 2000 | 3/1 | _____ |
| MLS 3302/3102 | Clinical Chemistry I and Lab | MLS 2000 | 3/1 | _____ |
| MLS 4303 | Clinical Immunology | MLS 2000, BIO 3304 | 3 | _____ |
| MLS 4600 | Molecular Diagnostics | MLS 2000, BIO 3301 or 3300 | 2 | _____ |
| <u>YEAR 4 (FALL)</u> | | | | |
| MLS 4301/4101 | Hematology II and Lab | MLS 3301 | 3/1 | _____ |
| MLS 4505/4205 | Clinical Microbiology and Lab | MLS 2000, BIO 3304 | 5/2 | _____ |
| 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 | _____ |
| <u>YEAR 4 (SPRING)</u> | | | | |
| 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 | _____ |
| | | | Total | 126 |

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

STUDENT NAME: _____

DATE: _____

UNIVERSITY CORE REQUIREMENTS (40 CR) GRADE**CU Value I: College Transition (8 Credits)**

| | | |
|------------------------------------------------|-----|-------|
| _____ | 4CR | _____ |
| Broad, Enduring Interest | | |
| <u>BIO 1205 Nature of Work in the Sciences</u> | 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 | | |
| <u>BIO 4300 Bioethics</u> | Major | _____ |
| Community & Responsibility | | |
| _____ | 4CR | _____ |
| Creative Expression & Self | | |

MEDICAL LAB SCIENCE PREREQUISITES (50 CR)

| | | |
|-----------------------------------------|-----|-------|
| *BIO 1301 General Biology I | 3CR | _____ |
| *BIO 1101 General Biology I Lab | 1CR | _____ |
| *BIO 2302 Anatomy & Physiology I | 3CR | _____ |
| *BIO 2102 Anatomy & 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 [†] | 3CR | _____ |
| BIO 3101 Genetics Lab [†] | 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 3301 Hematology I | 3CR | _____ |
| *MLS 3101 Hematology I Lab | 1CR | _____ |
| MLS 4301 Hematology II | 3CR | _____ |
| MLS 4101 Hematology II Lab | 1CR | _____ |
| *MLS 3302 Clinical Chemistry I | 3CR | _____ |
| *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 4304 Immunohematology | 3CR | _____ |
| *MLS 4104 Immunohematology Lab | 1CR | _____ |
| *MLS 4505 Clinical Microbiology | 5CR | _____ |
| *MLS 4205 Clinical Microbiology Lab | 2CR | _____ |
| MLS 4600 Molecular Diagnostics | 2CR | _____ |
| *MLS 4800 Clinical Competency Review | 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.**
- [†]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.