

Biology – Medical Lab Science

12 credits in the major and 9 credits in the minor must be completed at Alvernia University
When pursuing a double major, you must have 12 distinct credits between the two majors.

Semester 1	Credits	Semester 2	Credits
Diversity graduation requirement cannot be fulfilled through major courses; students should fulfill this with a Gen Ed class			
SRH 101: Search Sem-Enduring Questions or HNR 160: Honor Search-Enduring Questions	3	BIO 104: Principles of Biology II	4
BIO 103: Principles of Biology I	4	CHE 105: General Chemistry II	3
CHE 104: General Chemistry I	3	CHE 111: General Chemistry II Lab	1
CHE 110: General Chemistry I Lab	1	THE 105 or PHI 105	3
CHE 107: Laboratory Safety	1	Gen Ed	3
Gen Ed	<u>3</u>	Gen Ed	<u>3</u>
TOTAL	15	TOTAL	17
Complete 5 hours of Community Service		Complete 5 hours of Community Service	
Semester 3	Credits	Semester 4	Credits
CHE 201: Organic Chemistry I	1	CHE 202: Organic Chemistry II	3
CHE 210: Organic Chemistry II	4	CHE 211: Organic Chemistry II Lab	1
BIO 107/117: Anatomy & Physiology I w/lab	3	BIO 108/118: Anatomy & Physiology II w/Lab	4
MAT 209: Probability and Statistics or BIO 409	3	Gen Ed	3
THE 105 or PHI 105	3	Gen Ed	<u>3</u>
Gen Ed	<u>3</u>		
TOTAL	17	TOTAL	14
Complete 5 hours of Community Service		Complete 5 hours of Community Service	
Semester 5	Credits	Semester 6	Credits
CHE 212: Analytical Chemistry	4	BIO 221 General Microbiology	4
BIO 303 Genetics (BIO 309 Lab)	4	BIO ELECTIVE	3-4
BIO 409: Immunology or MAT 209	3	Gen Ed	3
Gen Ed	3	Gen Ed	<u>3</u>
Gen Ed	<u>3</u>		
TOTAL	17	TOTAL	13-14
Complete 5 hours of Community Service		Complete 5 hours of Community Service	
Semester 7	Credits	Semester 8	Credits
BIO 420: Medical Lab Science Clinical I	<u>16</u>	BIO 421: Medical Lab Science Clinical II	<u>16</u>
TOTAL	16	TOTAL	16
Complete 5 hours of Community Service		Complete 5 hours of Community Service	

Academic Policy on Eligibility for Participation of May Commencement Ceremony

The academic policy, which the Registrar follows, is: A student who has 6 or less credits remaining to complete the degree may participate in the May Commencement Ceremony. The Graduation Application is available online in myAlvernia on the 'Academics' tab. Seniors must submit the Graduation Application to the Registrar's Office as follows: October 1 for May Graduation; December 1 for August graduation; and March 1 for December graduation.

If you have any questions, please call the Registrar's Office (610.796.8201)

Curriculum Sheets, EAB Navigate, and AUAdvise

The information on this page and the Curriculum Sheet is provided in AUAdvise - EAB Navigate as a static tool for discussion purposes when meeting with students to schedule courses. [Degree Audit uAchieve](#) remains the official source for each student's curriculum audit. Degree Audit uAchieve must be used together with the Curriculum Sheet to determine whether the information noted during scheduling meetings on the curriculum sheet remains accurate.

General Notes

- A minimum of 123 credits are required for graduation.
- Where appropriate, courses required for the major can be used to satisfy General Education requirements.
However, the credits earned for these courses are applied to either Gen Ed requirements or the major, not both.
- Paths of Knowledge coursework may count towards major or minor requirements but may not fulfill a second Mid-Level Liberal Arts Exploration requirement.
- Students are expected to follow the catalog requirements for General Education, the major, and additional requirements.
- A minor or second major within the areas listed under Paths of Knowledge automatically fulfills that area of the Gen Ed requirements.
- Students must complete 45 of their last 60 credits at Alvernia University
- Students must complete community service hours as part of the General Education Program

Major Notes

Students interested in a career working in a clinical laboratory can pursue the Biology Medical Laboratory Science degree. This 3 + 1 program offers instructional courses at Alvernia's campus for the first 3 years, and a fourth year of clinical study in a school of medical technology approved by the National Accrediting Agency for Clinical Laboratories Sciences (NAACLS).

Alvernia has an affiliation agreement with Reading Hospital and Medical Center who assists the application process for admission to the clinical program. Admission is determined solely by the hospital. Upon acceptance and completion of required coursework, graduates become eligible to

take the certification examination for medical technologists and after successful completion, are entitled to use the designation “Medical Technologist”. In addition to Alvernia’s curriculum listed below, clinical experience in the hospital facility requires 30-32 credits. Courses include: Immunohematology, Chemistry, Clinical Microscopy, Coagulation, Hematology, Microbiology, Serology and Immunology. For students who do not obtain a position in the NAACLS accredited program, their fourth and final year at Alvernia would be spent completing the requirements for a Bachelor of Science in Biology.

Degree/Major: BS BIOLOGY–MEDICAL LAB SCIENCE

Name: _____ Id: _____

2nd Major: _____ 3rd Major: _____ Minor: _____ 2nd Minor: _____

Matriculation Year 2023-2024 - Term: _____

GENERAL EDUCATION

Grade Notes:

Enduring Questions (12 cr)

/_/ SEARCH Sem. Enduring Questions (3) _____
/_/ THE 105 Foundations of Theology (3) _____
/_/ PHI 105 Introduction to Philosophy (3) _____
/_/ COM 101 Composition & Research (3) _____
(C grade or better)

Exploring the Natural World (6-8)

MAT Met in Related Area (x) _____
(not MAT 100)
 Met in Related Area (x) _____
(Science with Lab)

Culture & Language (9 cr)

/_/ COM _____ (3) _____
(not COM 100 or 101)
World Language – 2 courses in sequence
/_/ _____ (3) _____
/_/ _____ (3) _____

Individuals & Communities (6 cr)

/_/ HIS or POS _____ (3) _____
/_/ _____ (3) _____
(PSY, HIS, POS, SOC, SSC, or ECON)

Creative Expressions (6 cr)

/_/ LIT _____ (3) _____
/_/ _____ (3) _____
(Art, Music, or Theatre)

Ethical Leaders & Followers (6 cr)

/_/ THE/PHI _____ (3) _____
(200-400 level)
/_/ THE/PHI _____ (3) _____
(ethics/morality @ 200 level)

Paths of Knowledge (9 cr @ 200-400 level in ONE path)

Path 1: Interdisciplinary Study; Path

2: Multidisciplinary Study;

Path 3: In-depth Disciplinary Study-CHEMISTRY

Met in Related Area with CHE 201 (x) _____
 Met in Related Area with CHE 202 (x) _____
 Met in Related Area with CHE 212 (x) _____

Human Diversity: _____

Senior Capstone: _____

Writing Enhanced Course: will be met with CHE 211

Community Service Hours: Required: _____ Met: _____

Overall GPA >= 2.00

GPA in Major >= 2.00

Residency Requirements:

45 of last 60 credits

Min 12 Alvernia credits in major

Min 9 Alvernia credits in minor (if applicable)

Min 123 non-remedial credits earned

BIOLOGY–MED LAB SCI (85-86 cr)

Grade Notes:

Major (61-62 cr)

/_/ BIO 103 Principles of Biology I (4) _____
/_/ BIO 104 Principles of Biology II (4) _____
/_/ BIO 107 Anatomy & Physiology I (3) _____
/_/ BIO 117 Anatomy & Physiology I Lab (1) _____
/_/ BIO 108 Anatomy & Physiology II (3) _____
/_/ BIO 118 Anatomy & Physiology II Lab (1) _____
/_/ BIO 221 General Microbiology (4) _____
/_/ BIO 303 Genetics (3) _____
/_/ BIO 409 Immunology (3) _____
/_/ BIO 420 Medical Lab Sci Clinical I (16) _____
/_/ BIO 421 Medical Lab Sci Clinical II (16) _____
/_/ BIO _____ (3or4) _____

Related Requirements (24 cr)

/_/ CHE 104 General Chemistry I (3) _____
/_/ CHE 105 General Chemistry II (3) _____
/_/ CHE 107 Laboratory Safety (1) _____
/_/ CHE 110 General Chemistry Lab I (1) _____
/_/ CHE 111 General Chemistry Lab II (1) _____
/_/ CHE 201 Organic Chemistry I (3) _____
/_/ CHE 202 Organic Chemistry II (3) _____
/_/ CHE 210 Organic Chemistry Lab I (1) _____
/_/ CHE 211 Organic Chemistry Lab II (1) _____
/_/ CHE 212 Analytical Chemistry (4) _____
/_/ MAT 209 Probability & Statistics (3) _____

ELECTIVES (as needed)

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