

BS Biochemistry

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 <i>cannot</i> 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	CHE 105 – General Chemistry II CHE 111 – General Chemistry Lab II	3 1
BIO 103 – Principles of Biology w/ lab	4	BIO 104-Principles of Biology II	4
CHE 104 - General Chemistry I	3	MAT 230 – Calculus I	3
CHE 110 – General Chemistry Lab I	1	THE 105/PHI 105	3
CHE 107 – Laboratory Safety	1		
MAT 131 or Gen Ed	3		
TOTAL	15	TOTAL	14
Semester 3	Credits	Semester 4	Credits
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
PHY 200 –Physics I with lab	4	PHY 201 – Physics II with lab	4
MAJOR ELECTIVE	3-4	Gen Ed	3
THE 105/PHI 105	3	Gen Ed	3
Gen Ed	3	Gen Ed	3
TOTAL	17-18	TOTAL	17
Semester 5	Credits	Semester 6	Credits
Math & Science students can enroll for an optional Math & Science internship for 6 credits any time after they reach Junior standing.			
BIO 303/309 – Genetics w/ lab	4	BIO 304/311 or BIO 409: Immunology (Fall course) <u>or</u> Gen Ed	3-4
MAT 209 – Probability & Statistics	3	BIO 221 – General Microbiology w/ lab Gen Ed	4 3
MAT 220 – Math/Statistics Computer Lab	1	Gen Ed	3
Gen Ed or BIO 409 (<i>Fall course offered every other year</i>)	3-4	Gen Ed	3
Gen Ed	3	Gen Ed	3
Gen Ed	3		
TOTAL	17-18	TOTAL	16-17
Semester 7	Credits	Semester 8	Credits
CHE 401 - Biochemistry	3	SCI 402 – Senior Seminar	2
CHE 410 – Biochemistry Lab	1	SCI 407 – Research II or SCI 480 Internship	3
CHE 301 – Physical Chemistry I	3	CHE 302 – Physical Chemistry II	3
CHE 310– Physical Chemistry I lab	1	CHE 311 – Physical Chemistry II Lab	1
SCI 406 – Research I or SCI 480 Internship	3	Elective	3
Elective or BIO 409 (if BIO 304/311 was not taken)	3	Elective	3
Elective	3		
TOTAL	17	TOTAL	15

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)

*** Please be sure to review the 23-24 course catalog carefully to ensure that you meet all prerequisite requirements for the required and related classes in your major.***

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

Degree/Major: BS BIOCHEMISTRY

Name: _____ Id: _____

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

Matriculation Year 2024-2025 - Term: _____

GENERAL EDUCATION

GradeNotes:

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)

- Met with MAT 209 (x) _____
(not MAT 100)
- Met with BIO 103 (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-BIOLOGY

- Met in Related w/ BIO 221 (x) _____
- Met in Related w/ BIO 303/309 (x) _____
- Met in Related w/ BIO 304/311 or 409 (x) _____

- Human Diversity: _____
- Senior Capstone: will be met with SCI 406/407
- 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

BIOCHEMISTRY (79-83 cr)

GradeNotes:

Major (35 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 301 Physical Chemistry I (3) _____
- CHE 302 Physical Chemistry II (3) _____
- CHE 310 Physical Chemistry Lab I (1) _____
- CHE 311 Physical Chemistry Lab II (1) _____
- CHE 401 Biochemistry (3) _____
- CHE 410 Biochemistry Lab (1) _____

Select:

- SCI 480 Internship () _____
- SCI 480 Internship () _____
(must complete a total of 6 credits)

OR

- SCI 406 Research I (3) _____
- SCI 407 Research II (3) _____

Major Elective: (3-4 cr) select 1 course from:

CHE 212, 221, 315; BIO 205, 315, 405, 409; MAT 231

/ / _____ () _____

Related Requirements (37-38 cr)

- BIO 103 Principles of Biology I (4) _____
- BIO 104 Principles of Biology II (4) _____
- BIO 221 General Microbiology (4) _____
- BIO 303 & 309 Genetics and Lab (4) _____
- BIO 304 Cell Biology & BIO 311 **OR** (4) _____
BIO 409 Immunology (3) _____
- PHY 200 Physics I (4) _____
- PHY 201 Physics II (4) _____
- MAT 209 Probability & Statistics (3) _____
- MAT 220 Math Stats Computer Lab (1) _____
- MAT 230 Calculus I (4) _____
- SCI 402 Seminar (2) _____

Recommended (3 cr):

- MAT 131 Pre-Calculus (3) _____

ELECTIVES

- _____ () _____
- _____ () _____
- _____ () _____
- _____ () _____
- _____ () _____
- _____ () _____
- _____ () _____
- _____ () _____
- _____ () _____
- _____ () _____