

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 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	CHE 105 – General Chemistry II	3
BIO 103 – Principles of Biology w/ lab	4	CHE 111 – General Chemistry Lab II	1
CHE 104 - General Chemistry I	3	BIO 104-Principles of Biology II	4
CHE 110 – General Chemistry Lab I	1	MAT 230 – Calculus I	3
CHE 107 – Laboratory Safety	1	THE 105/PHI 105	3
MAT 131 or Gen Ed	3		
TOTAL	15	TOTAL	14
Complete 5 hours of Community Service		Complete 5 hours of Community Service	
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	3
THE 105/PHI 105	3	Ed	3
Gen Ed	3	Gen	3
TOTAL	17-18	Ed	17
Complete 5 hours of Community Service		Complete 5 hours of Community Service	
		TOTAL	
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)	3-4
MAT 209 – Probability & Statistics	3	or Gen Ed	
MAT 220 – Math/Statistics Computer Lab	1	BIO 221 – General Microbiology w/ lab	4
Gen Ed or BIO 409 (Fall course offered every other year)	3-4	Gen Ed	3
Gen Ed	3	Gen	3
Gen Ed	3	Ed	3
TOTAL	17-18	Gen	16-17
Complete 5 hours of Community Service		Complete 5 hours of Community Service	
		TOTAL	
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	15
TOTAL	17	Complete 5 hours of Community Service	
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)

*** 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 2023-2024 - 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)

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

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