

Carroll Community College
A.S. Transfer Plan in Biochemistry

A.S. in Physical Sciences, Chemistry Concentration to B.S. in Biochemistry

This transfer plan is intended for students pursuing an **A.S. in Physical Sciences, Chemistry Concentration at Carroll Community College** who are interested in pursuing a **B.S. in Biochemistry** at Stevenson University. The equivalencies below demonstrate how a student can meet both the requirements of the associate degree and prepare for a seamless transfer to Stevenson. Any student who enters Stevenson with an A.A. or A.S. degree will have completed all general education requirements with the exception of composition II if not taken at the community college. Please note:

- Only courses that have course equivalencies are displayed. This guide does not show all transferable courses from this college. It also does not display all Stevenson University courses that will fulfill a specific requirement.
- Program requirements must be completed with a grade of “C” or better, and general education courses must be passed with a grade of “D” or better, with the exception of college composition, which must be passed with a “C-” — 70 or higher.
- Stevenson University will accept up to 70 credits from 2-year institutions. Up to 90 credits can be applied to degree requirements from a combination of 2-year institutions, 4-year institutions, and non-direct classroom instruction (including CLEP, AP, and other nationally recognized standardized examination scores). For additional information about credit transfer, please see: <http://www.stevenson.edu/admissions-aid/getting-started/transfer-students/transfer-credit-evaluation/>
- For scholarship information please see the “Paying for College” page on: <http://www.stevenson.edu/transfer>
- Transfer plans are intended to be used as planning tools. If you need additional assistance in selecting courses to take prior to transferring to Stevenson University, contact Stevenson Admissions at 443-352-4450.

Community College Degree Requirements	Stevenson Equivalency	Category	Credits Transferred
BIOL-101 Fundamentals of Biology 1	BIO 113/L: General Biology I: Cell Biology and Genetics	Program Requirement	4
PHYS-111 Physics 1 for Scientists and Engineers	PHYS 215 General Physics I with Calculus	Program Requirement	4
PHYS-212 Physics 2 for Scientists and Engineers	PHYS 216: General Physics I with Calculus	Program Requirement	4
MATH-136 Calculus of a Single Variable 2	MATH 221: Calculus II	General Elective	4
CHEM-201 Organic Chemistry 1	CHEM 210/L – Organic Chemistry I with Lab	Program Requirement	5
CHEM-202 Organic Chemistry 2	CHEM 211/L – Organic Chemistry II with Lab	Program Requirement	5
Elective SU Recommends: Biology 240 Genetics	BIO 230 Genetics	Program Requirement	4
ENGL 101 College Writing	ENG 151 College Writing I	General Education	3
ENGL 102 Writing About Literature	ENG 152 College Writing II	General Education	3

Community College Degree Requirements	Stevenson Equivalency	Category	Credits Transferred
Arts & Humanities: General Education Fine and Performing Arts or Humanities course SU recommends COMM 105	Humanities or Fine Art CM 101 Public Speaking	General Education – HUM/FA and Communication Intensive	6
Biological and Physical Sciences: CHEM 105 Principles of General Chemistry I CHEM 106 Principles of General Chemistry II	CHEM 115/L General Chemistry I with Lab CHEM 116/L General Chemistry II with Lab	General Education – Scientific Reasoning Lab	8
Mathematics: MATH 135: Calculus of a Single Variable 1	 MATH 220 Calculus I	General Education – Quantitative Literacy SEE Requirement	4
Social and Behavioral Sciences: SU recommends 6 credits from two different disciplines	Social Science SEE Requirement	General Education	6
Total	60 Credits Please note: A minimum of 60 credits are needed for the associate degree		

Remaining Courses to be taken at Stevenson

Students who complete the plan above including all recommended courses and earn the A.S. in Chemistry will take the following courses at Stevenson to meet the B.S. requirements for Biochemistry. Students who transfer before completing the associate degree may have more general education and program requirements to take and fewer free electives.

General Education Requirements (0 credits)

Major Requirements (33-37 credits)

BIOCH 327	Biochemistry	3 credits
BIOCH 345L	Integrative Laboratory I	2 credits
BIOCH 427	Advanced Biochemistry	3 credits
BIOCH 470	Capstone Internship	3 credits
	or	
BIOCH 471	Capstone Internship	6 credits
BIOCH 475	Capstone Seminar	3 credits
CHEM 213	Digital Information Literacy for Chemistry	1 credit
CHEM 313	Career Connections in Chemistry	1 credit
SCI 215	Writing in the Sciences	3 credits

Students select 5 Biochemistry electives.

Group 1 Electives: 6-7 credits

Group 2 Electives: 5-11 credits

Additional Credits Needed: 23-27- credits of general electives

Total credits to be taken at SU: 60

Suggested Course Sequence

YEAR 3				
SEMESTER	FALL		SPRING	
RECOMMENDED COURSES	SCI 215 Writing in the Sciences 200-Level Writing Intensive (WI)	3	BIOCH 427 Advanced Biochemistry	3
	BIOCH 327 Biochemistry	3	BIO/CHEM Group 1 or Group 2 Elective	2-4
	BIOCH 345L Integrative Laboratory I	2	BIO/CHEM Group 1 or Group 2 Elective	2-4
	CHEM 213 Digital Information Literacy for Chemistry	1	CHEM 313 Career Connections in Chemistry	1
	General Elective	3	General Elective	3
	General Elective	3		
CREDITS	15 CREDITS		13-15 CREDITS	
YEAR 4				
SEMESTER	FALL		SPRING	
RECOMMENDED COURSES	BIOCH 470 OR 471 Capstone Internship	3/6	BIO/CHEM Group 1 or Group 2 Elective	2-4
	BIOCH 475 Capstone Seminar	3	BIO/CHEM Group 1 or Group 2 Elective	2-4
	BIO/CHEM Group 1 or Group 2 Elective	2-4	General Elective	3
	General Elective	3	General Elective	3
	General Elective	3	General Elective, if needed	3
CREDITS	13-16 CREDITS		13-17 CREDITS	

Signed 7/13/2022