



Bachelor of Science – Biochemistry
Transfer Guide – Colorado Community College System Students
Transferring to: Colorado State University Pueblo
Effective starting 2022

I. General Education Courses

	Credit Hours	Community College Course Number and Title or gtPathways Category	CSU Pueblo Courses and Credits
Written Communication	6	ENG 121/1021: English Composition I (GT-CO1) ENG 122/1022: English Composition II (GT-CO2)	ENG 101, 3 credits ENG 102, 3 credits
Mathematics	5	MAT 201/2410, Calculus I (GT-MA1)	MATH 126, 5 credits
Arts & Humanities	9	COM 115/1150: Public Speaking Two gtPathways Arts & Humanities courses from two different areas (GT-AH1, GT-AH2, GT-AH3, or GT-AH4)	CID 103, 3 credits 6 credits
Social & Behavioral Sciences	6	Two gtPathways Social & Behavioral Science courses from two different areas (GT-SS1 , GT-SS2 , or GT-SS3)	6 credits
History	3	One gtPathways History course (GT-HI1)	3 credits
Natural & Physical Sciences	10	CHEM 111/1111, General College Chemistry I & Lab (GT-SC1) CHEM 112/1112, General College Chemistry II & Lab (GT-SC1)	CHEM 121/L, 5 cr CHEM 122/L, 5 cr
	39	TOTAL GEN ED CREDITS	39

II. Required Courses

Credit Hours	CCCS Community College Course Number and Title	CSU Pueblo Courses (credits)
5	MAT 202/2420 – Calculus II (GT-MA1)	MATH 224, 5 credits
5	PHY 211/2111 -- Physics I-Calculus Based with Lab (GT-SC1)	PHYS 221/L, 5 credits
5	PHY 212/2112 – Physics II-Calculus Based with Lab (GT-SC1)	PHYS 222/L, 5 credits
5	BIO 111/1111 – General College Biology I with Lab (GT-SC1)	BIOL 182/L, 4 credits
20	TOTAL REQUIRED COURSES CREDITS	19

I. Elective and Recommended Courses

“Recommended Courses” means courses that students are strongly encouraged, but not required, to take for preparation in this major and are listed below in priority order.

Credit Hours	CCCS Community College Course Number and Title
1	Choose 1 credits from the AS Approved List

60	TOTAL ASSOCIATE DEGREE CREDITS
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ASSOCIATE OF ARTS OR SCIENCE DEGREE REQUIREMENTS (60 Credits):

Students should note that all required courses must be satisfactorily completed as part of the AA or AS degree at the community college and will also transfer and apply to the bachelor's degree requirements at the receiving 4-year institution. However, if you're going to transfer before completing the AA or AS degree, you may not need some of these courses. In that case, check with the receiving institution and an advisor for your options.

GUARANTEES & LIMITATIONS

- 1. Completion of Associate's Degree:** This transfer guide identifies the courses a student needs to complete (with a C- or higher) to earn an AA or AS degree at a Colorado community/junior college in order to be able to finish the designated baccalaureate degree in no more than 60 credits. Per [Colorado Commission on Higher Education \(CCHE\) Policy I, L](#), students who complete an AA or AS degree at a Colorado community/junior college and who are admitted to a Colorado public baccalaureate institution are guaranteed the following: the full transfer and application of a minimum of 60 credits toward the baccalaureate degree requirements at the Colorado institution of higher education; completion of the lower-division component of the receiving institution's general education core curriculum; and junior standing. Course credit may be applied to major, elective or other requirements at the receiving institution's discretion. If more than 60 college-level credits are taken or the student gets lower than a C- in one or more courses at the community/junior college, then some loss of transfer credit may occur, and students may not be able to complete this baccalaureate degree in 120 credits.
- 2. Transfer Before Completing the Associate's Degree:** If the student intends to transfer prior to completing an AA or AS degree, this transfer guide should still be used to identify the courses that can most effectively prepare them for efficiently completing the designated major at the baccalaureate institution to which they are transferring. While not completing the required associate's degree eliminates the guarantees described here, gtPathways general education courses identified in Section I are guaranteed to transfer and apply to the receiving institution's gtPathways lower division general education requirements. Students are strongly encouraged to finish course sequences (such as English Comp I & II or Calculus I, II & III) before transferring.

For additional information on CCHE transfer policies and gtPathways guaranteed transfer of general education credit, visit <https://cdhe.colorado.gov/guaranteed-transfer-gt-pathways-general-education-curriculum>

To file a transfer-related complaint with the Colorado Department of Higher Education, visit <https://cdhe.colorado.gov/students/how-do-i/filing-a-student-complaint>

The chart shown below illustrates the remaining requirements to complete the BS: Biochemistry after transferring to CSU Pueblo. 64 semester credits are the maximum amount of transfer credit allowed from two-year institutions. Therefore the credits shown below **MUST** be completed at CSU Pueblo.

Additional Major Course Requirements		
CHEM 301/L	Organic Chemistry I with Lab	5
CHEM 302/L	Organic Chemistry II with Lab	5
CHEM 317/L	Quantitative Analysis with Lab	5
CHEM 321	Physical Chemistry I	3
CHEM 322	Physical Chemistry II	3
CHEM 370	Academic Enrichment	0.5
CHEM 411	Biochemistry I	3
CHEM 412/L	Biochemistry II with Lab	5
CHEM 419/L	Instrumental Analysis with Lab	5
CHEM 420/L	Inorganic Chemistry with Lab	4
CHEM 492 OR CHEM 495	Research OR Independent Study	3
CHEM 493	Seminar	1
BIOL 181/L	College Biology I/Organismal with Lab	4
BIOL 301/L	General Microbiology with Lab	5
BIOL 350	Mendelian and Population Genetics	2
BIOL 351/L	Molecular Biology and Genetics with Lab	4
BIOL 412/L	Cellular Biology with Lab	4
Total Transfer Credit Applied Toward BS Degree		60
Total Additional Credit Required for BS Degree		61.5
Total BS Degree Requirements		121.5