

2 + 2 Joint Articulation Transfer Agreement

Bachelor of Science in Chemistry (Secondary Teaching Emphasis)

Colorado State University – Pueblo And Community College Of Denver

B.S. Requirements at CSU-Pueblo			A.S. Requirements at CCD		
Lower Division General Education Requirements			Equivalent Courses at CCD		
Course #	Course Title	Credits	Course #	Course Title	Credits
ENG 101	Composition I	3	ENG 121	English Composition I	3
ENG 102	Composition II	3	ENG 122	English Composition II	3
SPCOM 103	Speaking and Listening	3	COM 115	Public Speaking	3
	*A grade of B or better is required for admission to the Teacher Education program			*A grade of B or better is required for admission to the Teacher Education program	
Humanities	Select from statewide Gen Ed Core	6	*Humanities	*Select from statewide Gen Ed Core *3 credits carried over to the Free Electives Section	6 + *(3)
Social Science	Select from statewide Gen Ed Core	3	Social Science	Select from statewide Gen Ed Core	3
PSYCH 151 or PSYCH 251	Intro Human Development or Childhood and Adolescence	3	PSY 235 or PSY 238	Human Growth & Development or Child Development	3
History	Select from Statewide Gen Ed Core	3	History	Select from Statewide Gen Ed Core	3
MATH 126	Calculus & Analytic Geometry I	5	MAT 201	Calculus I	5
Physical and Life Sciences			Physical and Life Sciences		
CHEM 121/L and CHEM 122/L	General Chemistry I and General Chemistry II	5	CHE 111 and CHE 112	General College Chemistry I and General College Chemistry II	5
		5			5
Subtotal		39	Subtotal		39
Required Chemistry Core Courses			Equivalent Courses at CCD		
CHEM 121/L	General Chemistry I/Lab	(5)	CHE 111	General College Chemistry I	(5)
CHEM 122/L	General Chemistry II/Lab	(5)	CHE 112	General College Chemistry II	(5)
CHEM 211/L or CHEM 301/L	Intro to Organic Chemistry/Lab or Organic Chemistry I/Lab	4			
CHEM 221/L or CHEM 419/L	Inorganic Chemistry/Lab or Instrumental Analysis/Lab	3			
CHEM 311	Survey of Biochemistry	3			
CHEM 317/L	Quantitative Analysis/Lab	5			
CHEM 321	Physical Chemistry I	3			
CHEM 493	Seminar	1			
Subtotal		19-22	Subtotal		0
Related Course Requirements			Equivalent Courses at CCD		
BIOL 100/L	Principles of Biology/Lab	4	BIO 105	Science of Biology	4
BIOL 121/L	Environmental Conservation/Lab	4			

GEOL 101/L	Earth Science/Lab	4	GEY 111	Physical Geology	4
MATH 126	Calculus & Analytic Geometry I	(5)	MAT 201	Calculus I	(5)
MATH 224	Calculus & Analytic Geometry II	5	MAT 202	Calculus II (Recommend this course be completed at CCD)	5
PHYS 221/L	General Physics I/Lab	5	PHY 211	Physics: Calculus-based I	5
PHYS 222/L	General Physics II/Lab	5	PHY 212	Physics: Calculus-based II	5
Free Electives	May be any academic discipline	3	*Humanities	*Select from statewide Gen Ed Core *3 credits carried over from Gen Ed Humanities Core	3
Subtotal		30	Subtotal		18
Additional Major Requirements			Equivalent Courses at CCD		
ED 202	Foundations of Education	3	EDU 221	Introduction to Education	3
ED 280	Educational Media and Tech	3			
ED 301	Frameworks of Teaching	3			
ED 412	Teaching Diverse Learners	3			
ED 444	Teaching Secondary Science	4			
ED 485	Capstone Seminar in Education	2			
ED 488/489	Secondary Student Teaching Student Teaching K-12	12			
RDG 435	Content Area Literacy	4			
Subtotal		34	Subtotal		3
Total Credits for A.S.					60
Total Transfer Credit Accepted for A.S.					60
Total Additional Credit Required for B.S.					62
Total B.S. Degree Requirements					122

Students who successfully complete this program as specified are eligible to apply for a *Destination CSU-Pueblo* scholarship.

This articulation transfer agreement replaces all previous agreements between CCD and CSU-Pueblo in Bachelor of Science in Chemistry (Secondary Education Emphasis). This agreement will be reviewed annually and revised (if necessary) as mutually agreed.

cam: 12/03/09

revised: 05/27/10