2 + 2 Joint Articulation Transfer Agreement (Draft)

Bachelor Science in Biology/Chemistry (Double Major)

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
Humanities	Select from statewide Gen Ed Core	6	Humanities	Select from statewide Gen Ed Core	9
Social Science	Select from statewide Gen Ed Core	6	Social Science	Select from statewide Gen Ed Core	6
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 BIOL 181/L and BIOL 182/L	 College Biology I/Organismal Biol/Lab and College Biology II/Cellular Biol/Lab	 4 4	Physical and Life Sciences BIO 112 and BIO 111	 General College Biology II and General College Biology I	 5 5
Subtotal		**37**	**Subtotal**		**42**
Required Biology Core Courses			**Equivalent Courses at CCD**		
BIOL 171	Career Planning I	1			
BIOL 181/L	College Biology I/Organismal Biol/Lab	(4)	BIO 112	General College Biology II	(5)
BIOL 182/L	College Biology II/Cellular Biol/Lab	(4)	BIO 111	General College Biology I	(5)
BIOL 201/L or BIOL 202/L	Botany/Lab or Zoology/Lab	4			
BIOL 301/L	General Microbiology/Lab	5			
BIOL 350	Mendelian & Population Genetics	2			
BIOL 351	Molecular Biology & Genetics	2			
BIOL 352	Evolutionary Biology & Ecology	3			
BIOL 412/L or BIOL 413/L or BIOL 414/L	Cellular Biology/Lab or Plant Physiology/Lab or Vertebrate Physiology/Lab	4 4 4			
BIOL 493 or CHEM 493	Seminar	1			
Biology Electives	Advisor Approved Biology Electives	10			
Subtotal		**32**	**Subtotal**		**0**
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 221/L	Inorganic Chemistry/Lab	3			
CHEM 301/L	Organic Chemistry I/Lab	5			
CHEM 302/L	Organic Chemistry II/Lab	5			

CHEM 317/L	Quantitative Analysis/Lab	5			
CHEM 321	Physical Chemistry I	3			
CHEM 322	Physical Chemistry II	3			
CHEM 419/L	Instrumental Analysis/Lab	5			
Subtotal		**39**	**Subtotal**		**10**
Required Support Courses					
MATH 126	Calculus & Analytic Geometry I	(5)	MAT 201	Calculus I	(5)
MATH 224	Calculus & Analytic Geometry II	5	MAT 202	Calculus II	5
PHYS 201/L and PHYS 202/L or PHYS 221/L and PHYS 222/L	Principles of Physics I/Lab and Principles of Physics II/Lab or General Physics I/Lab and General Physics II/Lab	4 4 5 5	PHY 111 and PHY 112 or PHY 211 and PHY 212	Physics: Algebra-Based I and Physics: Algebra-Based II or Physics: Calculus-Based I and Physics: Calculus-Based II	5 5 5 5
Subtotal		**13-15**	**Subtotal**		**10**
Total Credits for A.S.					**62**
Total Transfer Credit Accepted for A.S.					**60**
Total Additional Credit Required for B.S.					**64**
Total B.S. Degree Requirements					**124**

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 Biology/Chemistry (Double Major). This agreement will be reviewed annually and revised (if necessary) as mutually agreed.

cam: 12/03/09
revised: 05/28/10
revised: 08/14/10