## 2 + 2 Joint Articulation Transfer Agreement (Draft)

## **Bachelor of Science in Biology (Cellular & Molecular Emphasis)**

## Colorado State University – Pueblo And Community College Of Denver

B.S. Require	ments 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 *See Open Electives Section	6 + *(3)
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 221	Applied Calculus: Intuitive Approach	4	MAT 201	Survey of Calculus	5
Physical and Life Sciences			Physical and Live Sciences		
BIOL 181/L and	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
Subtotal	Conege Biology II/Centular Biol/Eac	36	Subtotal	General Conege Biology 1	39
Required Biology Courses		30	Equivalent Courses at CCD		39
BIOL 171	Career Planning I	1	Equivalent	ourses at CCD	1
BIOL 171	College Biology I/Organismal Biol/Lab	(4)	BIO 112	Canaral Callaga Biology II	(5)
BIOL 181/L			BIO 112	General College Biology II General College Biology I	(5)
BIOL 182/L BIOL 201/L	College Biology II/Cellular Biol/Lab	(4)	DIO III	General College Blology I	(5)
	Botany/Lab	4			
or BIOL 202/L	or Zoology/Lab				
BIOL 301/L	General Microbiology/Lab	5			
BIOL 350	Mendelian & Population Genetics	2			
BIOL 350	Molecular Biology & Genetics/Lab	4			
BIOL 351	Evolutionary Biology & Ecology	3			
BIOL 332 BIOL 402	Immunology	3			
BIOL 402 BIOL 412/L	Cellular Biology/Lab	4			
BIOL 412/L BIOL 493	Seminar Siology/Lab	1			
Biology	Upper Division Biology Electives	7			
Electives	Opper Division Biology Electives	/			
Subtotal		34	Subtotal		0
Required Chemistry Courses		J <b>4</b>	Equivalent Courses at CCD		U
CHEM 121/L	General Chemistry I/Lab	5	CHE 111	General College Chemistry I	5
CHEM 121/L	General Chemistry II/Lab	5	CHE 111	General College Chemistry II	5
CHEM 301/L	Organic Chemistry I/Lab	5	CHE 112	General Conege Chemistry II	3
CHEM 301/L	Organic Chemistry I/Lab  Organic Chemistry II/Lab	5			
CHEM 411	Biochemistry	3			
			Cubtatal		10
Subtotal		23	Subtotal		10

Required Math and Physics Courses			<b>Equivalent Courses at CCD</b>			
MATH 156	Introduction to Statistics	3	MAT 135	Introduction to Statistics	3	
MATH 221	Applied Calculus: Intuitive Approach	(4)	MAT 201	Calculus I	(5)	
PHYS 201/L	Principles of Physics I/Lab	4	PHY 111	Physics: Algebra-based I	5	
and	and		and	and		
PHYS 202/L	Principles of Physics II/Lab	4	PHY 112	Physics: Algebra-based II	5	
or	or		or	or		
PHYS 221/L	General Physics I	5	PHYS 211	Physics: Calculus-Based I	5	
and	and		and	and		
PHYS 222/L	General Physics II	5	PHYS 212	Physics: Calculus-Based II	5	
Subtotal		11-13			10	
Additional Degree Requirements						
Open Electives	May be any academic discipline	14-16	Statewide	*Select from stateside Humanities	3	
	including Biology		Gen Ed Core	Gen Ed Core		
Subtotal		14-16	Subtotal		3	
Total Credits for A.S.						
Total Transfer Credit Accepted for A.S.						
Total Additional Credit Required for B.S.						
Total B.S. Degree Requirements						

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 (Cellular & Molecular Emphasis). This agreement will be reviewed annually and revised (if necessary) as mutually agreed.

cam: 12/14/09 revised: 05/27/10 revised: 08/14/10