2 + 2 Joint Articulation Transfer Agreement

Bachelor of Science in Biology (Bioinformatics Emphasis)

Colorado State University – Pueblo
And
Pueblo Community College

B.S. Requirements at CSU-Pueblo			**A.S. Requirements at PCC**		
Lower Division General Education Requirements			**Equivalent Courses at PCC**		
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			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	BIO 111 and BIO 112	General College Biology I and General College Biology II	5 5
Subtotal		**37**	**Subtotal**		**42**
Required Biology Core Courses			**Equivalent Courses at PCC**		
BIOL 171	Career Planning I	1			
BIOL 181/L	College Biology I/Organismal Biol/Lab	(4)	BIO 111	General College Biology I	(5)
BIOL 182/L	College Biology II/Cellular Biol/Lab	(4)	BIO 112	General College Biology II	(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	Cellular Biology/Lab	4			
BIOL 493	Seminar	1			
Subtotal		**22**	**Subtotal**		**0**
Bioinformatics Emphasis Course Requirements			**Equivalent Courses at PCC**		
BIOL 351/L	Adv Genetics & Molecular Bio Lab	2			
CHEM 411	Biochemistry I	4			
BIOL 450/L	Sur Genomics & Bioinformatics/Lab	3			
Electives	Advisor Approved Upper Division Biology Elective	5			
Subtotal		**13**	**Subtotal**		
Additional Major Requirements			**Equivalent Courses at PCC**		
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 301/L	Organic Chemistry I/Lab	5			
CHEM 302/L	Organic Chemistry II/Lab	5			

CHEM 412/L	Biochemistry II/Lab	5			
CIS 171	Intro to Java Programming	4	CSC 160	Computer Science I: (JAVA)	4
MATH 126	Calculus and Analytic Geometry I	(5)	MAT 201	Calculus I	(5)
MATH 224	Calculus and Analytic Geometry II	5	MAT 202	Calculus II	5
MATH 256	Probability for Engineers & Science	3			
MATH 356	Statistics for Engineers & Scientists	3			
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		**40**	**Subtotal**		**20**
Total Credits for A.S.					**62**
Total Transfer Credit Accepted for A.S.					**60**
Total Additional Credit Required for B.S.					**63**
Total B.S. Degree Requirements					**123**

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 PCC and CSU-Pueblo in Bachelor of Science in Biology (Bioinformatics Emphasis). This agreement will be reviewed annually and revised (if necessary) as mutually agreed.

cam: 02/27/09
revised: 02/18/10
revised: 06/07/10