

**ARTICULATION AGREEMENT FOR
AS NATURAL SCIENCES AND BS PHYSIOLOGY
BETWEEN LARAMIE COUNTY COMMUNITY COLLEGE
AND THE UNIVERSITY OF WYOMING**

OVERVIEW:

This formal program articulation agreement is made and entered into by Laramie County Community College, hereinafter referred to as LCCC, and University of Wyoming, hereinafter referred to as UW. By this agreement LCCC and UW express a shared commitment to increasing opportunities for student access to and success in higher education.

PURPOSE:

This agreement provides students who have completed the **Associate of Science** degree with articulated coursework in the area of Natural Sciences, the opportunity to complete a **Bachelor of Science in Physiology** at UW. Any LCCC student who has earned an Associate of Science degree with coursework that adheres to the guidelines within this agreement is guaranteed that UW will accept designated major related credits and that all general education credits will apply to the Bachelor of Science degrees in a manner consistent with the treatment of native UW students and given junior status in the major.

CONDITIONS OF TRANSFER:

Section I: Admissions and Matriculation

LCCC students maintaining continuous enrollment under this agreement will be afforded the same treatment and protection as native UW Physiology, College of Arts and Sciences students enrolled under a specific catalog.

Criteria for acceptance into College of Arts and Sciences will be consistent with the criteria outlined in the institutional articulation agreement between LCCC and UW.

LCCC, upon request of students, will provide verification of completed courses to UW through its Office of Registration and Records.

Transfer students from LCCC will have access to financial aid, scholarships, and student services on the same basis as native students.

UW will apply the same academic progress and graduation standards to LCCC transfer students as those applicable to native UW students.

Section II: Program Plan

While a course-by-course equivalence was used in the development of this plan, this agreement presumes that the general education core requirements at LCCC meet general education requirements at UW. Students falling under this program articulation agreement will be responsible for successfully completing the additional prescribed requirements. *42h, of the minimum 120h required for a BS degree, **MUST** be at the upper division level*

Table 1. Course-by-course transfer articulation (LCCC and UW)

LCCC Course			UW Equivalent Course		
<i>USP</i>					
COLS 1000	Intro to College Success	3	USP FYS	First Year Seminar	3
CO/M 1010	Introduction to Public Speaking	3	COJO 1010	Public Speaking USP 2015 COM2	3
	Humanities Elective	3	USP H	USP 2015 H	3
	Social Science Elective	3	USP H	USP 2015H	3
ENGL 1010	English I: Composition	3	ENGL 1010	College Comp. & Rhetoric	3
POLS 1000	American & Wyoming Government	3	USP V	American & Wyoming Government	3
ECON 1200	Economics, Law, and Government	3		Economics, Law, and Government	3
HIST 1211	U.S. History to 1865	3		U.S. History to 1865	3
HIST 1221	U.S. History from 1865	3		U.S. History from 1865	3
HIST 1251	Wyoming History	3		History of Wyoming	3

LCCC Course			UW Equivalent Course		
Course	Course Title	Credits	Course	Course Title	Credits
BIOL 1010	General Biology	4	LIFE 1010	General Biology	4
BIOL 2022	Animal Biology	4	LIFE 2022	Animal Biology	4
CHEM 1020	General Chemistry I	4	CHEM 1020	General Chemistry I	4
CHEM 1030	General Chemistry II	4	CHEM 1030	General Chemistry II	4
CHEM 2320	Organic Chemistry I	3	CHEM 2420	Organic Chemistry I	4
CHEM 2325	Organic Chemistry I Lab	1			
CHEM 2340	Organic Chemistry II	3			
CHEM 2345	Organic Chemistry II Lab	1	CHEM 2440	Organic Chemistry II	4
MATH 1400	College Algebra	3	MATH 1400	College Algebra	3
MATH 1401	Pre-Calculus Algebra				
MATH 1405	Pre-Calculus Trigonometry	3	MATH 1405	Trigonometry	3
MATH 2200	Calculus I	4	MATH 2200	Calculus I	4
MICRO 2240	Medical Microbiology	4	MICRO 2240	Medical Microbiology	4
PHYS 1110	General Physics I	4	PHYS 1110	General Physics I	4
PHYS 1120	General Physics II	4	PHYS 1120	General Physics II	4
STAT 2050	Fundamentals of Statistics	4	STAT 2050	Fundamentals of Statistics	4

UNIVERSITY OF WYOMING COURSEWORK TO COMPLETE BS IN PHYSIOLOGY

Courses needed for ALL Physiology majors

Course	Course Title	Credits
CHEM 2420	Organic Chemistry I (this is the usual 3 rd Chemistry course)	4
CHEM XXXX	4th Chemistry course	4
LIFE 3050	Genetics	4
ZOO 3115	Human Systems Physiology	4
ZOO 4125	Integrative Physiology	4
ZOO 4100	Communication in Biology	3
	ASD and ASG courses (College of Arts and Sciences requirement)	6

Elective Courses needed for major in Physiology (minimum of 18h required)

Course	Course Title	Credits
ZOO 3010	Vertebrate Anatomy, Embryology & Histology	4
ZOO 3600	Principles of Animal Behavior	3
ZOO 4110	HIV/AIDS: The Disease and the Dilemma	3
ZOO 4190	Comparative Environmental Physiology	4
ZOO 4280	Introduction to Neuroscience	3
ZOO 4340	Developmental Biology & Embryology	4
ZOO 4670	Cell Physiology	4
ZOO 4735	Advanced Topics in Physiology	2+
NEUR 5100	Structure & Function of the Nervous System	4
NEUR 5685	Neurophysiology	3
NEUR 5887	Molecular Neuropharmacology	3
LIFE 3600	Cell Biology	4
KIN 3021	Physiology of Exercise (Needs KIN2040/41 Human Anatomy as a prerequisite)	3
KIN 3038	Exercise Psychology (will need permission of instructor)	3
KIN 3042	Biomechanics of Human Movement	3
KIN 4042	Applied Biomechanics (prereq KIN 3042)	3
MOLB 3000	Introduction to Molecular Biology	3
MOLB 3610	Principles of Biochemistry	4
MOLB 4100	Clinical Biochemistry	3
MOLB 4400	Immunology	4
PSYC 4080	Physiological Psychology	4
PHCY 4450	Pathophysiology	4
ANSC 4120	Principles of Mammal Reproduction	3
SOC 3550	Medical Sociology	3
ANTH 4210	Human Osteology	3
ANTH 4230	Forensic Anthropology	3
PATB 4130	Mammalian Pathobiology	3
PATB 4140	Principles of Toxicology	3
PATB 4710	Medical Virology	3
CHEM 3550	Physical Chemistry for the Life Sciences	3

Several of the courses listed above have prerequisites. For 5000-level courses permission of the instructor is required

Natural Sciences, Associates of Science

Laramie County Community College

FRESHMAN

Fall Semester			Hrs	Spring Semester			Hrs
Dept	#	Course Title	#	Dept	#	Course Title	#
BIOL	1010	General Biology ²	4	BIOL	2022	Animal Biology ²	4
CHEM	1020	General Chemistry I ³	4	CHEM	1030	General Chemistry II	4
MATH	1400	College Algebra ³ or	3	MATH	1405	Pre-Calculus Trigonometry ³	3
MATH	1401	Pre-Calculus Algebra ³	3	ENGL	1010	English I: Composition	3
COLS	1000	College Success	3				
			TOTAL				TOTAL
			<u>14</u>				<u>14</u>



SOPHOMORE

Fall Semester			Hrs	Spring Semester			Hrs
Dept	#	Course Title	#	Dept	#	Course Title	#
MICRO	2240	Medical Microbiology	4	STAT	2050	Fundamentals of Statistics	4
MATH	2200	Calculus I ⁴	4	PHYS	1120	General Physics II OR	4
PHYS	1110	General Physics I OR	4	CHEM	2340	Organic Chemistry II AND	4
CHEM	2320	Organic Chemistry I AND	4	CHEM	2345	Organic Chemistry II Laboratory	3
CHEM	2325	Organic Chemistry I Laboratory	3			Aesthetic Analysis (Humanities) ¹	3
CO/M	1010	Public Speaking	3			Wyoming State Requirement ²	3
		Cultural Awareness (Social Sciences) ¹	3				
			TOTAL				TOTAL
			<u>18</u>				<u>14</u>
						Total Degree Hours	60

Transfer Recommendations and Notes:

1. Students are strongly encouraged to take a *Cultural Awareness* or *Aesthetic Analysis* course that corresponds to the College of Arts & Sciences Diversity (D) and Global Studies (G) electives or else they will have to take D & Gs at UW. A list of D & G courses that transfer is available here (https://wyosss.uwyo.edu/bnrprod/bwckytfc.p_display_transfer_catalog). Courses that are either U3D or U3G meet the ASD and ASG, respectively. One suggested course is ANTH1200 Intro to Cultural Anthropology, which meets the ASG requirement.
2. Courses that meet the *Wyoming State Requirement* include: U.S. to 1865 (HIST1211), U.S. from 1865 (HIST1221) Wyoming History (HIST1251), Economics, Law & Government (ECON1200), or American & Wyoming Government (POLS1000). Wyoming Government (POLS1100) will also meet *Wyoming State Requirement* but 2 additional credits will be needed to meet total degree credits.
3. A minimum grade of C is required for BIOL1010, BIOL2022, CHEM1020, MATH1400, MATH1405
4. This course is part of the "minimum of 30h at C or better list" for the whole BS degree (see below)

Physiology, Bachelors of Science

University of Wyoming

JUNIOR

Fall Semester				Hrs	Spring Semester				Hrs
Dept	#	Course Title	#		Dept	#	Course Title	#	
ZOO	3115	Human Systems Physiology ³	4				4 th Chemistry Course ² OR	4	
LIFE	3050	Genetics ²	4		PHYS	1120	General Physics II	4	
CHEM	2420	Organic Chemistry I ² OR	4				Upper Division Physiology Elective ^{2,5}	3	
PHYS	1110	General Physics I	4				Upper Division Physiology Elective ^{2,5}	3	
		ASD or ASG (A&S Core) ¹	3				Upper Division Elective ⁴	3	
							Upper Division Elective ⁴	3	
TOTAL				15					TOTAL



SENIOR

Fall Semester				Hrs	Spring Semester				Hrs
Dept	#	Course Title	#		Dept	#	Course Title	#	
ZOO	4125	Integrative Physiology ²	4		ZOO	4100	Communication in Biological Sciences ³	3	
		Upper Division Physiology Elective ^{2,5}	3				Upper Division Physiology Elective ^{2,5}	3	
		Upper Division Physiology Elective ^{2,5}	3				Upper Division Physiology Elective ^{2,5}	3	
		Upper Division Elective ⁴	3				Upper or Lower Division Elective ⁴	4	
		ASD or ASG (A&S Core) ¹	3						
TOTAL				16					TOTAL
									Total Degree Hours
									120
									Upper Division Hours
									42

Transfer Recommendations and Notes:

1. Time has been allocated for the D&Gs
2. A minimum of 30h in these electives must be C or better. (Includes Calculus I from LCCC)
3. A minimum grade of a C required in these courses
4. These Upper Division electives may be physiology-related but they are not required to be. May be Internship- or Research related

5. *Physiology Electives (18h):* ZOO 3010 Vertebrate Anatomy, Embryology & Histology (4), ZOO 3021 Physiology of Exercise (3), ZOO 3600 Principles of Animal Behavior (3), ZOO 4110 HIV/AIDS (3), ZOO 4190 Comparative Environmental Physiology (4), ZOO 4280 Introduction to Neuroscience (3), ZOO 4340 Developmental Biology & Embryology (4), ZOO 4670 Cell Physiology (4), ZOO 4735 Advanced Topics in Physiology (2+), NEUR 5100 Structure & Function of the Nervous System (4), NEUR 5685 Neurophysiology (3), NEUR 5887 Molecular Neuropharmacology (3), LIFE 3600 Cell Biology (4), MOLB 3000 Introduction to Molecular Biology (3), MOLB 3610 Principles of Biochemistry (4), MOLB 4100 Clinical Biochemistry (3), MOLB 4400 Immunology (4), PSYC 4080 Physiological Psychology (4), PHCY 4450 Pathophysiology (4), ANSC 4120 Principles of Mammal Reproduction (3), SOC 3550 Medical Sociology (3), ANTH 4210 Human Osteology (3), ANTH 4230 Forensic Anthropology (3), PATB 4130 Mammalian Pathobiology (3), PATB 4140 Principles of Toxicology (3), PATB 4710 Medical Virology (3)

TERMS of AGREEMENT:

This agreement is made and entered into in the academic year 2015-2016 and remains in force unless a new articulation agreement is signed by all parties. The agreement is subject to annual review to assure currency with the respective degree requirements, and may be amended at any time via written request by either LCCC or UW. Should either party desire to discontinue this agreement, advance notification of one year will be required.

SIGNATURES:

Laramie County Community College and University of Wyoming hereby enter into this program articulation agreement leading from the Associate of Science degree with articulated coursework in Bachelor of Science in Physiology by the affixing of signatures of the academic officers of both institutions.

Dr. Jose Fierro
Chief Academic Officer
Laramie County Community College

6-15-15

Date

Dr. David Jones
Vice President for Academic Affairs
University of Wyoming

6/8/15

Date

Kathleen Hathaway
Dean of School of Math and Sciences
Laramie County Community College

4/15/15

Date

Dr. Donal Skinner
Head, Department of Zoology and Physiology
University of Wyoming

6/2/2015

Date

Dr. Paula Lutz
Dean, College of Arts & Sciences
University of Wyoming

6/4/15

Date