# 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

#### 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

Dr. David Jones

Vice President for Academic Affairs

University of Wyoming

Date

Kathleen Hathaway

Dean of School of Math and Sciences Laramie County Community College

Dr. Donal Skinner

Head, Department of Zoology and Physiology

University of Wyoming

Date

Dr. Paula Lutz

Dean, College of Arts & Sciences

University of Wyoming

# Natural Science - Biology, AS

## **Laramie County Community College**

## **FRESHMAN**

				-			
Fall Sem	ester		Hrs	Spring S	Semest	er	Hrs
BIOL	1010	General Biology	4	BIOL	2022	Animal Biology	4
СНЕМ	1020	General Chemistry I	4	CHEM	1030	General Chemistry II	4
COLS	1000	Introduction to College Success	3	MATH	1405	Pre-Calculus Trigonometry	3
MATH	1400	College Algebra		ENGL	1010	English I	3
	OR		3				
MATH	1401	Pre-Calculus Algebra					

**TOTAL** 14 TOTAL





## **SOPHOMORE**

DOT HOUSE										
Fall Semester		Hrs	Spring Semester			Hrs				
MICRO	2240	Medical Microbiology	4	STAT	2050	Fundamentals of Statistics	4			
МАТН	2200	Calculus I	4	PHYS	1120	General Physics II				
PHYS	1110	General Physics I			OR		4			
	OR		4	CHEM	2340	Organic Chemistry II AND				
СНЕМ	2320	Organic Chemistry I AND		CHEM	2345	Organic Chemistry II Laboratory				
CHEM	2325	Organic Chemistry I Laboratory				Aesthetic Analysis (Humanities)	3			
CO/M	1010	Public Speaking	3			Wyoming State Requirement	3			
		Cultural Awareness (Social Science)	3							
		TOTAL	<u>18</u>			TOTAL	<u>14</u>			
						TOTAL DEGREE HOURS	60			

### Transfer Recommendations and Notes:

Students are strongly encouraged to take a General Education Electives 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.

Courses that meet the Wyoming State Requirement include: U.S. to 1865 (HIST 1211), U.S. from 1865 (HIST 1221) Wyoming History (HIST 1251), Economics, Law & Government (ECON 1200)

A minimum grade of C is required for BIOL 1010, BIOL 2022, MATH 1400, MATH 1405

Students not taking Physics I & II at LCCC will have to take both at UW. Only 3 semesters of Chemistry are required in Zoology

## Physiology, BS

## **University of Wyoming**

	JUNIOR								
Fall Sen	nester		Hrs	Spring S	Semest	ter	Hrs		
ZOO	3115	Human Systems Physiology	4			4th Chemistry Course			
LIFE	3050	Genetics	4		OR		4		
СНЕМ	2420	Organic Chemistry		PHYS	1120	General Physics II			
	OR		4			Upper Division Physiology Elective*	3		
PHYS	1110	General Physics I				Upper Division Physiology Elective*	3		
		A&S Core Diversity in U.S., ASD	3			Upper Division Elective	3		
						Upper Division Elective	3		
	3	TOTAL	15			TOTAL	16		



			SEN	IOR			
Fall Semester		Hrs	Spring Semester		Hrs		
Z00	4125	Integrative Physiology	4	ZOO	4100	Communication in Biological Sciences	3
		Upper Division Physiology Elective*	3			Upper Division Physiology Elective*	3
		Upper Division Physiology Elective*	3			Upper Division Physiology Elective*	3
		Upper Division Elective	3			Elective	4
		A&S Core Global Awareness, ASG	3				-
		TOTAL	<u>16</u>			TOTAL	<u>13</u>
						TOTAL DEGREE HOURS	<u>120</u>

## Transfer Recommendations and Notes:

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

This is a guide for course work in the major; actual course sequence may vary by student. • Please refer to the online student degree evaluation. • Not all courses are offered every semester and some electives may have prerequisites. • Students should review the course descriptions in the University Catalog and consult with their academic advisor to plan accordingly.

**University of Wyoming Requirements include**: Students must have a minimum cumulative GPA of 2.0 to graduate. • Students must complete 42 hours of upper division coursework, 30 of which must be from the University of Wyoming. • Courses must be taken for a letter grade unless offered only for S/U.

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

	LCCC Course			UW Equivalent Course					
USP									
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	USPH	USP 2015H	3				
ENGL 1010	English I: Composition	3	ENGL 1010	College Comp. & Rhetoric	3				
POLS 1000	American & Wyoming Government	3		American & Wyoming Government	3				
ECON 1200	Economics, Law, and Government	3	USP V	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	CUENA 2420	Ossesia Chemista I	
CHEM 2325	Organic Chemistry I Lab	1	CHEM 2420	Organic Chemistry I	4
CHEM 2340	Organic Chemistry II	3	3	Organic Chemistry II	
CHEM 2345	Organic Chemistry II Lab	1	CHEM 2440		4
MATH 1400	College Algebra	3	14 A TIL 1400	College Algebra	2
MATH 1401	Pre-Calculus Algebra	3	MATH 1400		3
MATH 1405	Pre-Calculus Trigonometry	3	MATH 1405	Trigonometry	3
MATH 2200	Calculus I	4	MATH 2200	Calculus I	4
<b>MICRO 2240</b>	Medical Microbiology	4	<b>MICRO 2240</b>	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 <sup>rd</sup> Chemistry course)	4
CHEM XXXX	4th Chemistry course	4
LIFE 3050	Genetics	4
ZOO 3115	Human Systems Physiology	4
200 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	Credit
ZOO 3010	Vertebrate Anatomy, Embryology & Histology	4
200 3600	Principles of Animal Behavior	3
200 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