ARTICULATION AGREEMENT FOR AS NATURAL RESOURCE BIOLOGY AND BS PHYSIOLOGY BETWEEN NORTHWEST COLLEGE AND THE UNIVERSITY OF WYOMING

OVERVIEW:

This formal program articulation agreement is made and entered into by Northwest College, hereinafter referred to as NWC, and University of Wyoming, hereinafter referred to as UW. By this agreement NWC 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 Physiology, the opportunity to complete a **Bachelor of Science in Physiology** at UW. Any NWC 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

NWC 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 NWC and UW.

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

Transfer students from NWC 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 NWC 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 NWC 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, <u>MUST</u> 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 NWC or UW. Should either party desire to discontinue this agreement, advance notification of one year will be required.

SIGNATURES:

Northwest 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. Gerry Giraud Vice President of Academic Affairs Northwestern College

David Jones Dr. David Jones

Vice President for Academic Affairs University of Wyoming

Dr. Matthew Ewers

Dean of Instruction Northwestern College

Dr. Marnee Crawford

LHS Division Chair Northwestern College

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

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

Dr. Stefani Hicswa President

2/23/16

3/4/16

Date

February 2, 2016 Date

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

General Education requirements at NWC and the University Studies Program at UW transfer as a block articulation between NWC and UW.

NWC Course			UW Equivalent Course			
Course	Course Title	Credits	Course	Course Title	Credits	
BIOL 1010	General Biology	4	LIFE 1010	General Biology	4	
BIOL 2020	General Biology II	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	4	CHEM 2320	Organic Chemistry I	4	
CHEM 2340	Organic Chemistry II	4	CHEM 2340	Organic Chemistry II	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	
MATH 1400	College Algebra	4	MATH 1400	College Algebra	3	
MATH 1450	PreCalc Algebra & Trig	5	MATH 1450	Algebra & Trigonometry	3	
STAT 2050	Fundamentals of Statistics	4	STAT 2050	Fundamentals of Statistics	4	

UNIVERSITY OF WYOMING COURSEWORK TO COMPLETE BS IN PHYSIOLOGY

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	

Courses needed for ALL Physiology majors

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

AS Biology (Natural Resource Biology: Track 1) and BS Physiology **Northwest College FRESHMAN** Hrs **Spring Semester** Hrs **Fall Semester** # # Course Title # Course Title Dept Dept 4 BIOL 2020 General Biology II³ 4 1010 General Biology³ BIOL 1030 General Chemistry II 1020 General Chemistry I 4 CHEM 4 CHEM 1020 English II⁵/Tech Writing 3 1400 College Algebra^{3,4} OR 4 ENGL MATH $(5)^{3}$ Core Elective⁷ 4 MATH 1450 Precalc Algebra & Trig 3 General Education Requirement¹ 3 ENGL 1010 English I 3 **Freshman Seminar** 18 TOTAL TOTAL 18 Northwest College SOPHOMORE **Fall Semester** Hrs **Spring Semester** Hrs # # # Course Title Dept # Course Title Dept 4 PHYS 1110 General Physics I OR STAT 2050 Fundamentals of Statistics 4 $(3)^4$ 2385 Research Life & Physical Sciences⁶ OR 2320 Organic Chemistry I CHEM BIOL 2 2395 Biological Research 1 Wellness 1110 General Physics I OR General Education Requirement¹ PHYS 3 2320 Organic Chemistry I OR 1200 Intro Cultural Anthropology² CHEM ANTH 4 Core Elective⁷ 4 PHYS 1120 General Physics II OR CHEM 2340 Organic Chemistry II POLS 1000 American & WY Government OR 3 1221 The United States from 1865 HIST General Education Requirement¹ 3 TOTAL 15 TOTAL 13 **Total Degree Hours** 64 **Transfer Recommendations and Notes:** 1. Students are strongly encouraged to take at least one General Education Requirement (Humanities/Visual and Performing Arts/Social Science) course that corresponds to the College of Arts & Sciences Diversity (ASD) and Global Studies (ASG) electives or else they will have to take ASD & ASGs at UW. A list of D & G courses that transfer is available here (https://wyossb.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. Students are advised to take ANTH1200 as one of the General Education Requirements to meet the A&S ASG requirement 3. A minimum grade of C is required for BIOL1010, BIOL2020, MATH1400/1450 4. If students take MATH1450 at NWC then they will not need to take MATH1405 Trigonometry at UW

5. If students take ENGL 1020 at NWC then they must also take CO/M 1010 Public Speaking to count as COM2 at UW

6. If students opt for BIOL2385, overall hours for the Associates will increase by 2h

7. Core Electives include: MOLB2210 General Microbiology, PSYC 1000 - General Psychology, ZOO 2010 - Human Anatomy and Physiology I, ZOO 2020 - Human Anatomy and Physiology II

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Fall Se	mester		Hrs	Spring S	Semester		Hrs
Dept	#	Course Title	#	Dept	#	Course Title	#
PHYS	1110) General Physics I OR		PHYS	1120) Physics II OR	4
CHEM	2320) Organic Chemistry I OR	4	CHEM		4 th Chemistry course	
PHYS	1120) General Physics II OR	- A6	MATH	2200	Calculus I ³	4
CHEM		4 th Chemistry course				Upper Division Physiology Elective ^{2,4}	3
MATH	1405	5 Trigonometry ^{4,5}	3			Upper Elective ⁶	3
200	3115	Human Systems Physiology ³	4				
LIFE	3050	Genetics ²	4				
		тс	DTAL <u>15</u>		r	TOTAL	<u>14</u>
		тс	F.L	\mathbb{W}	T	TOTAL	<u>14</u>
		тс	F.L	I W	T	TOTAL	<u>14</u>
Fall Se	mester	TC	F.L	ENIOR Spring S	Semester	TOTAL	
Fall Se Dept	mester #	TC Course Title	SI SI	No. of Concession, Name of Street, or other	Gemester #	TOTAL Course Title	<u>14</u> Hrs #
Dept	#		SI Hrs	Spring S	#		Hrs
Dept	#	Course Title	SI Hrs # 4	Spring S Dept	#	Course Title	Hrs #
Dept	#	Course Title Integrative Physiology ²	SI Hrs # 4 ive ^{2,4} 3	Spring S Dept	#	Course Title) Scientific Communication ⁴	Hrs # 3
Dept	#	Course Title Integrative Physiology ² Upper Division Physiology Election	SI Hrs # 4 ive ^{2,4} 3 ive ^{2,4} 3	Spring S Dept	#	Course Title) Scientific Communication ⁴ Upper Division Physiology Elective ^{2,4}	Hrs # 3 3
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	#	Course Title Integrative Physiology ² Upper Division Physiology Electi Upper Division Physiology Electi Upper Division Physiology Electi ASD or ASG (A&S Core)	SI Hrs # 4 ive ^{2,4} 3 ive ^{2,4} 3 ive ^{2,4} 3 3	Spring S Dept	#	Course Title D Scientific Communication ⁴ Upper Division Physiology Elective ^{2,4} Upper Division Physiology Elective ^{2,4} Upper Elective ⁶ Upper Elective ⁶	Hr: # 3 3 3 3 3 3

Transfer Recommendations and Notes:

1. Time has been allocated for one of the two D&Gs. If the ASG or ASD is not met at NWC then an additional 3h is required

2. A minimum of 30h must be at C or better for these courses.

3. A C is required

4. *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)

5. If students take MATH1450 at NWC then Trigonometry not required at UW