### ARTICULATION AGREEMENT FOR AS BIOLOGY AND BS ZOOLOGY BETWEEN CENTRAL WYOMING COLLEGE AND THE UNIVERSITY OF WYOMING

### **OVERVIEW:**

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

CWC students maintaining continuous enrollment under this agreement will be afforded the same treatment and protection as native UW Zoology, 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 CWC and UW.

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

Transfer students from CWC 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 CWC 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 CWC 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 (CWC and UW)

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

CWC Course			UW Equivalent Course	Credits
Course Title	Credits	Course		
	4	LIFE 1010		4 4
	4	LIFE 2022		
			General Chemistry I	4
			General Chemistry II	4
General Chemistry II				4
Intro to Organic Chemistry				4
				3
Pre-Calculus Algebra				3
Trigonometry	3			4
	4			4
	4			4
	4	PHYS 1120		
	4	PHYS 1310		4
			College Physics II	4
College Physics II	<del></del>		Fundamentals of Statistics	4
	General Biology General Biology II General Chemistry I General Chemistry II Intro to Organic Chemistry Organic Chemistry I Pre-Calculus Algebra Trigonometry Calculus I General Physics I General Physics II College Physics II Fundamentals of Statistics	General Biology         4           General Biology II         4           General Chemistry I         4           General Chemistry II         4           Intro to Organic Chemistry         4           Organic Chemistry I         4           Pre-Calculus Algebra         4           Trigonometry         3           Calculus I         4           General Physics I         4           College Physics II         4           College Physics II         4	General Biology         4         LIFE 1010           General Biology II         4         LIFE 2022           General Chemistry I         4         CHEM 1020           General Chemistry II         4         CHEM 1030           Intro to Organic Chemistry         4         CHEM 2300           Organic Chemistry I         4         CHEM 2420           Pre-Calculus Algebra         4         MATH 1400           Trigonometry         3         MATH 1405           Calculus I         4         MATH 2200           General Physics I         4         PHYS 1110           General Physics II         4         PHYS 1310           College Physics I         4         PHYS 1320           College Physics II         4         PHYS 1320	General Biology 4 LIFE 1010 General Biology General Biology II 4 LIFE 2022 Animal Biology General Chemistry I 4 CHEM 1020 General Chemistry I General Chemistry II 4 CHEM 1030 General Chemistry II Intro to Organic Chemistry 4 CHEM 2300 Intro to Organic Chemistry Organic Chemistry I 4 CHEM 2420 Organic Chemistry I Pre-Calculus Algebra 4 MATH 1400 College Algebra Trigonometry 3 MATH 1405 Trigonometry Calculus I 4 MATH 2200 Calculus I General Physics I 4 PHYS 1110 General Physics I General Physics II 4 PHYS 1310 College Physics I College Physics II 4 PHYS 1320 College Physics II College Physics II 4 PHYS 1320 College Physics II

## UNIVERSITY OF WYOMING COURSEWORK TO COMPLETE BS IN ZOOLOGY

Courses required for ALL Zoology majors

Course	Course Title	Credits
CHEM XXXX	3 <sup>rd</sup> Chemistry course – not CHEM1000 (usually CHEM2300)	4
LIFE 3050	Genetics	4
LIFE 3400	General Ecology	3
LIFE 3500	Evolutionary Biology	4
ZOO 4100	Communication in Biological Sciences	3
	ASD and ASG courses (College of Arts and Sciences requirement)	6

### Students must select 1 course from the following list:

Courses not taken here may be added to the electives list below

Course	Course Title	Credits
ZOO 4330	Ichthyology	3
ZOO 4350	Ornithology	3
ZOO 4370	Mammalogy	3
ZOO 4380	Herpetology	3
ZOO 4540	Invertebrate Zoology	4

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

ive Courses n Course	Course Title	Credit
ZOO 3010	Vertebrate Anatomy, Embryology & Histology	4
ZOO 3115	Human Systems Physiology	4
ZOO 3600	Animal Behavior	3
ZOO 4190	Comparative Environmental Physiology	4
ZOO 4280	Introduction to Neuroscience	3
ZOO 4300	Wildlife Ecology & Management	5
ZOO 4310	Fisheries Management	3
200 4340	Developmental Biology & Embryology	4
200 4415	Behavioral Ecology	3
ZOO 4420	Conservation Biology	3
200 4430	Limnology Lab (must be taken with ZOO 4440 Limnology)	2
ZOO 4440	Limnology	3
ZOO 4735	Advanced Topics in Physiology	2+
ENTO 4678	Aquatic Entomology	3
ENTO 4682	Insect Anatomy & Physiology	5
ENTO 4684	Classification of Insects	4
MOLB 3000	Introduction to Molecular Biology	3
ANSC 4120	Principles of Mammal Reproduction	3
ANSC 3100	Principles of Animal Nutrition	3
PATB 4310	Introduction to Veterinary Parasitology	3
PATB 4360	Medical Entomology & Parasitology	3
PATB 4710	Medical Virology	3
A&S 4900	Advanced Topics in (e.g. Darwin and the Galapagos)	1+

## AS Biology and BS Zoology

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FRESHMAN						
Fall Sem	ester	Hrs	Spring Sem	ester	Hrs	
Dept #	Course Title	#	Dept #	Course Title	#	
BIOL	1010 General Biology	4	BIOL	2020 General Biology II	4	
СНЕМ	1020 General Chemistry I	4	CHEM	1030 General Chemistry II	4	
МАТН	1400 Pre-Calculus Algebra	4	MATH	1405 Trigonometry	3	
ENGL	1010 English Composition I	3	ENGL	1020 English Composition II	3	
UNST	1005 Freshman Seminar	1	FIN	1001 Personal Financial Planning	1	
N .						

TOTAL 10

TOTAL 15

# CENTRAL Wyoming COLLEGE

				V		
SOPHOMORE						
Fall Sen	nester	Hrs	Spring	g Semester	Hrs	
Dept #	Course Title	#	Dept	# Course Title	# -	
PHYS	1110 Physics I <i>OR</i> <sup>3</sup>		STAT	2050 Fundamentals of Statistics OR <sup>3</sup>		
PHYS	1310 College Physics I <i>OR</i>	4	PHYS	1120 Physics II OR	4	
CHEM	2300 Intro to Organic Chemistry OR	**	PHYS	1320 College Physics II		
CHEM	2320 Organic Chemistry I			Co-Curricular General Education	2	
МАТН	2200 Calculus I	5	HUM	Humanities Elective	. 3	
ORAL	Public Speaking	3	POLS	1000 American & Wyoming Government	3	
soc	Social Science	3	ARTS	Arts Elective	3	
WELL	Health & Wellness	1				
PEAC	PE Activity	1				
3	TOTA	L <u>17</u>		TOTAL	<u>15</u>	
				Total Degree Hours	<u>63</u>	

### Transfer Recommendations and Notes:

- 1. Students are strongly encouraged to take ART, SOC & HUM Electives that correspond 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 ASD & ASG 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 and ENGL 2340 American Indian Literature meets the ASD requirement.
- 2. A minimum grade of C is required for BIOL1010, BIOL2020, MATH1400, MATH1405.
- 3. For the BS in Zoology, students must take 2 semesters of Physics, a 3rd 3h Chemistry course (not 1000) and STAT2050

## AS Biology and BS Zoology

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Fall S	Semester		Hrs
Dept	#	Course Title	#
LIFE	3050	Genetics <sup>3</sup>	4
		Required Zoo Elective <sup>2,5</sup>	3
LIFE	3400	General Ecology	3
PHYS	1110	Physics I OR <sup>6</sup>	
PHYS	1310	College Physics I OR	4
CHEM	2300	Intro to Organic Chemistry OR	
СНЕМ	2320	Organic Chemistry I	

TITAL	r.				
Spring	Sen	ıester			Hrs
Dept	#		Course Title		#
STAT		2050	Fundamentals of Statistics OR6		
PHYS		1120	Physics II OR		4
PHYS		1320	College Physics II		
			Upper Division Zoology Elective <sup>2</sup>		3
			Upper Division Zoology Elective <sup>2</sup>		3
			Upper or Lower Elective⁴		2
			ASD or ASG (A&S Core)1		3
				TOTAL	



SENIOR						
Fall Semester		Hrs	Spring	Sem	lester	Hrs
Dept #	Course Title	#	Dept	#	Course Title	#
LIFE 3500	Evolutionary Biology <sup>2</sup>	4	zoo		4100 Communication in Biological Sciences <sup>3</sup>	3
	Upper Division Zoology Elective <sup>2</sup>	4			Upper Division Zoology Elective <sup>2</sup>	3
	Upper Division Zoology Elective <sup>2</sup>	3			Upper Division Zoology Elective <sup>2</sup>	3
	Upper Division Elective <sup>2</sup>	3			Upper Division Elective <sup>2</sup>	3
					Upper or Lower Elective⁴	2
	TOTAL	<u>14</u>			TOTAL	<u>14</u>
					Total Degree Hours	<u>120</u>
					Upper Division Hours	<u>42</u>

### Transfer Recommendations and Notes:

- 1. Time has been allocated for one of the ASD & ASGs. If students do not complete the other ASD/ASG at CWC then 3 more hours required
- 2. A minimum of 30h in these electives must be C or better. (Includes Calculus I from CWC)
- 3. A minimum grade of a C required in these courses
- 4. These electives may be zoology-related but they are not required to be. May be Internship- or Research-related
- 5. REQUIRED ELECTIVE COURSE. Students must select a course from the following list: ZOO 4330 Ichthyology (3); ZOO 4350 Ornithology (3); ZOO 4370 Mammalogy (3); ZOO 4380 Herpetology (3); ZOO 4540 Invertebrate Zoology (4)
- 6. For the BS in Zoology, students must take 2 semesters of Physics, a 3rd 3h Chemistry course (not 1000) and STAT2050

### 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 CWC or UW. Should either party desire to discontinue this agreement, advance notification of one year will be required.

### **SIGNATURES:**

Central Wyoming 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 Zoology by the affixing of signatures of the academic officers of both institutions.

Pen Lhann		
Ron Granger	7	

Vice President for Academic Affairs

Central Wyoming College

Dr. David Jones

Vice President for Academic Affairs

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Science Department Chair Central Wyoming College

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Dean, College of Arts & Sciences

University of Wyoming

Dr. Kathy Wells

Dean of Health & Sciences

Central Wyoming College

Dr. Donal Skinner

Head, Department of Zoology and Physiology

University of Wyoming

Date

Date

10/1/15 Date

Lo /29/15 Date

9-28-15

Date

Date