



SOUTH DAKOTA BOARD OF REGENTS
ACADEMIC AFFAIRS FORMS
Substantive Program Modification Form

UNIVERSITY:	USD
CURRENT PROGRAM TITLE:	Biology, B.S. (Conservation & Biodiversity or Physiology, Cell, & Molecular Biology Specialization)
CIP CODE:	26.0101
UNIVERSITY DEPARTMENT:	Biology
BANNER DEPARTMENT CODE:	UBIO
UNIVERSITY DIVISION:	College of Arts & Sciences
BANNER DIVISION CODE:	2A

University Approval

To the Board of Regents and the Executive Director: I certify that I have read this proposal, that I believe it to be accurate, and that it has been evaluated and approved as provided by university policy.

Elizabeth M. Freeburg

Vice President of Academic Affairs or
 President of the University

5/4/2020

Date

1. This modification addresses a change in:

- | | |
|-----------------------------------------------------------------------|---------------------------------------------------------------------------------------------|
| <input type="checkbox"/> Total credits required within the discipline | <input checked="" type="checkbox"/> Total credits of supportive course work |
| <input type="checkbox"/> Total credits of elective course work | <input type="checkbox"/> Total credits required for program |
| <input type="checkbox"/> Program name | <input checked="" type="checkbox"/> Existing specialization |
| <input type="checkbox"/> CIP Code | <input checked="" type="checkbox"/> Other (explain below) Add new specialization as option. |

2. Effective date of change: 8/1/2020

3. Program Degree Level:

Associate Bachelor's Master's Ed. Specialist Doctoral

4. Category :

Certificate Specialization Minor Major

5. If a name change is proposed, the change will occur (place an "X" in the appropriate box):

- On the effective date for all students
- On the effective date for students new to the program (enrolled students will graduate from existing program)

Proposed new name: _____

Reminder: Name changes may require updating related articulation agreements, site approvals, etc.

6. Primary Aspects of the Modification (add lines or adjust cell size as needed):

Existing Curriculum

Proposed Curriculum (highlight changes)

Biology, B.S. (Conservation & Biodiversity or Physiology, Cell, & Molecular Biology Specialization)

Biology, B.S. (Human Dynamics, Conservation & Biodiversity or Physiology, Cell, & Molecular Biology Specialization)

Biology, B.S. (Conservation & Biodiversity or Physiology, Cell, & Molecular Biology Specialization) Program Requirements				Biology, B.S. (Human Dynamics, Conservation & Biodiversity or Physiology, Cell, & Molecular Biology Specialization) Program Requirements			
Departmental Requirements							
BIOL	151/151L	General Biology I with lab [SGR #6]	4	BIOL	151/151L	General Biology I with lab [SGR #6]	4
BIOL	153/153L	General Biology II with lab [SGR #6]	4	BIOL	153/153L	General Biology II with lab [SGR #6]	4
BIOL	280/280L	Inquiry and Analysis in Biology with lab	2	BIOL	280/280L	Inquiry and Analysis in Biology with lab	2
All students must complete one of the following two Specializations:				All students must complete one of the following three Specializations:			
Conservation & Biodiversity Specialization (30 departmental credits; 10-14 non-departmental credits)				Conservation & Biodiversity Specialization (30 departmental credits; 10-14 non-departmental credits)			
Departmental Requirements for specialization				Departmental Requirements for specialization			
BIOL	311/311L	Principles of Ecology	4	BIOL	311/311L	Principles of Ecology	4
BIOL	473	Evolution	3	BIOL	473	Evolution	3
Subtotal (required courses in specialization):			7	Subtotal (required courses in specialization):			7
Departmental Distribution Requirements drawn from course groups below:				Departmental Distribution Requirements drawn from course groups below:			
Must complete <u>two</u> courses from the Biodiversity Course Group			6-8	Must complete <u>12 credits</u> from the <u>Conservation & Biodiversity Course Group</u>			
Biodiversity Course Group							
BIOL	401/401L	Plant Systematics ¹	4	BIOL	401/401L	Plant Systematics ^{1,5}	4
BIOL	405/405L	Entomology ¹	3	BIOL	405/405L	Entomology ¹	3
BIOL	407	Plants and Civilization	4	BIOL	407	Plants and Civilization ⁵	4
BIOL	434/434L	Herpetology ¹	3-4	BIOL	434/434L	Herpetology ¹	4
BIOL	435	Animal Diversity and Evolution	3	BIOL	435	Animal Diversity and Evolution	3
BIOL	436	Biogeography	3	BIOL	436	Biogeography	3
BIOL	452/452L	Comparative Plant Morphology ¹	3	BIOL	452/452L	Comparative Plant Morphology ^{1,5}	3
BIOL	463/463L	Ornithology ¹	3	BIOL	463/463L	Ornithology ¹	3
BIOL	469/469L	Fish Biology ¹	3	BIOL	469/469L	Ichthyology ¹	3
BIOL	473	Evolution ²	3	BIOL	473	Evolution ²	3
BIOL	485/485L	Invertebrate Paleontology ¹	4			Delete	
BIOL	486/486L	Vertebrate Paleontology ¹	4			Delete	
Subtotal (course group):			6-8	Delete			
Must complete <u>two</u> courses from the Conservation & Ecology Course Group:			6	Delete			
Conservation & Ecology Course Group				Delete			
BIOL	310	Environmental Science	3	BIOL	310	Environmental Science	3
BIOL	402	Animal Behavior	3	BIOL	402	Animal Behavior	3
BIOL	408/408L	Landscape Ecology ¹	3	BIOL	408/408L	Landscape Ecology ¹	3
BIOL	410	Conservation Biology	3	BIOL	410	Conservation Biology	3
BIOL	412/412L	Freshwater Ecology ¹	3	BIOL	412/412L	Freshwater Ecology ¹	3
BIOL	414/414L	Animal Ecology ¹	3	BIOL	414/414L	Animal Ecology ¹	3
BIOL	417/417L	Field Ecology ¹	3	BIOL	417/417L	Field Ecology ^{1,6}	3
BIOL	419/419L	Plant Ecology ¹	3	BIOL	419/419L	Plant Ecology ^{1,5}	3-4
BIOL	436	Biogeography	3	BIOL	436	Biogeography	3
BIOL	440/440L	Restoration Ecology ¹	3	BIOL	440/440L	Restoration Ecology ¹	3
BIOL	466	Environmental Toxicology and Contaminants	3	BIOL	466	Environmental Toxicology and Contaminants	3
Subtotal (course group):			6	Subtotal (course group):			12
Must complete <u>one</u> course from the Cell & Molecular or the Physiology & Structure Course Groups:			3-4	Must complete <u>3 credits</u> from the Physiology, Cell, & Molecular Biology Course Group:			

Cell & Molecular Course Group				Delete			
BIOL	425	Cellular Physiology	3	BIOL	425	Cellular Physiology	3
BIOL	441/441L	Histology ¹	3	BIOL	441/441L	Histology ¹	3
BIOL	443	Cell Biology	3	BIOL	443	Cell Biology	3
BIOL	475	Introduction to Molecular Biology	3	BIOL	475/ 475L	Introduction to Molecular Biology	3-4
BIOL	483	Developmental Biology	3	BIOL	483	Developmental Biology	3
Physiology & Structure Course Group				Delete			
BIOL	426	Endocrinology	3	BIOL	426	Endocrinology	3
BIOL	427/427L	Plant Physiology ¹	4	BIOL	427/427L	Plant Physiology ^{1,5}	4
BIOL	428/428L	Comparative Physiology ¹	3-4	BIOL	428/428L	Comparative Physiology ¹	3-4
BIOL	429	Biology of Reproduction	3	BIOL	429	Biology of Reproduction	3
BIOL	430	Neurobiology	3	BIOL	430	Neurobiology	3
BIOL	432	Behavioral Neuroscience	3	BIOL	432	Behavioral Neuroscience	3
BIOL	433	Environmental Phys. of Animals	3	BIOL	433	Environmental Phys. of Animals	3
BIOL	456	Mammalian Physiology	3	BIOL	456	Mammalian Physiology	3
				BIOL	471	Genetics	3
BIOL	481/481L	Vertebrate Anatomy and Embryology ¹	4	BIOL	481/481L	Vertebrate Anatomy and Embryology ¹	4
Subtotal (course group):			3-4	Subtotal (course group):			3
Must complete <u>one</u> course from the Capstone Group⁴:				Must complete <u>one</u> course from the Capstone Group⁴:			
BIOL	417/417L	Field Ecology ¹	3	BIOL	417/ 417L	Field Ecology ^{1,6}	3
BIOL	427/427L	Plant Physiology ¹	4	BIOL	427/427L	Plant Physiology ^{1,5}	4
BIOL	490	Senior Seminar	1	BIOL	490	Senior Seminar	1
BIOL	498	Undergraduate Research ³	2-3	BIOL	498	Undergraduate Research ³	2-3
UHO N	498	Undergraduate Research ³	2-3	UHON	498	Undergraduate Research ³	2-3
Subtotal (course group):			1-4	BIOL	402/402L	Animal Behavior	4
				Subtotal (course group):			1-4
¹ Lab courses. All students in the specialization must complete three upper-level Biology Lab courses in addition to BIOL 311/L. ² Course is part of group but is also required for students in this specialization and may therefore not be counted here as a distribution requirement as well. ³ Any 498 course used for a capstone must be approved by the Biology department chair or designee. ⁴ Some capstone courses may also be used for distribution credit for other course groups or to fulfill Lab course requirements.				¹ Lab courses. All students in the specialization must complete three upper-level Biology Lab courses in addition to BIOL 311/L. ² Course is part of group but is also required for students in this specialization and may therefore not be counted here as a distribution requirement as well. ³ Any 498 course used for a capstone must be approved by the Biology department chair or designee. ⁴ Some capstone courses may also be used for distribution credit for other course groups or to fulfill Lab course requirements. ⁵ Botany course. Students must complete one designated botany course. ⁶ Course may count as botany course with approval of Biology Department chair or designee.			
Electives			0-7	Electives			4-8
Any BIOL courses, 300 or 400 level, in addition to those taken to complete specified distribution requirements in Conservation & Biodiversity Specialization, for a total of 39 credits in BIOL.				Any BIOL courses, 300 or 400 level, in addition to those taken to complete specified distribution requirements in Conservation & Biodiversity Specialization, for a total of 40 credits in BIOL.			
Subtotal (all departmental requirements for this specialization)			40	Subtotal (all departmental requirements for this specialization)			40
Non-Departmental Requirements for Specialization				Non-Departmental Requirements for Specialization			
Non-Departmental requirements may also be applied toward a minor or second major.				Non-Departmental requirements may also be applied toward a minor or second major.			
Must complete <u>one</u> of the following courses: (4 credit hours)				Must complete <u>one</u> of the following courses: (4 credit hours)			
CHEM	106/106L	Chemistry Survey	4	CHEM	106/106L	Chemistry Survey	4
CHEM	112/112L	General Chemistry I	4	CHEM	112/112L	General Chemistry I	4
Must complete <u>one</u> of the following courses: (3-5 credit hours)				Must complete <u>one</u> of the following courses: (3-5 credit hours)			
CHEM	110/110L	Chemistry and the Environment	4	CHEM	110/110L	Chemistry and the Environment	4
CHEM	114/114L	General Chemistry II	4	CHEM	114/114L	General Chemistry II	4
CHEM	116/116L	Honors Principles of Chemistry	4	CHEM	116/116L	Honors Principles of Chemistry	4
PHYS	111/111L	Introduction to Physics I	4	PHYS	111/111L	Introduction to Physics I	4
PHYS	211/211L	University Physics I	5	PHYS	211/211L	University Physics I	5
ESCI	101/101L	Principles of Earth Science I	4	ESCI	101/101L	Principles of Earth Science I	4

ESCI	103/103L	Principles of Earth Science II	4	ESCI	103/103L	Principles of Earth Science II	4
ESCI	425	Introduction to Geographical Information Systems	3	ESCI	425	Introduction to Geographical Information Systems	3
Must complete <u>one</u> of the following Math courses: (3-5 credit hours)				Must complete <u>one</u> of the following Math courses: (3-5 credit hours)			
MATH	102	College Algebra [SGR #5]	3	MATH	102	College Algebra [SGR #5]	3
MATH	115	Precalculus [SGR #5]	5	MATH	115	Precalculus [SGR #5]	5
MATH	120	Trigonometry [SGR #5]	3	MATH	120	Trigonometry [SGR #5]	3
MATH	121	Survey of Calculus [SGR #5]	4	MATH	121	Survey of Calculus [SGR #5]	4
MATH	123/123L	Calculus I + Lab [SGR #5]	5	MATH	123/123L	Calculus I + Lab [SGR #5]	5
MATH	125/125L	Calculus II + Lab [SGR #5]	5	MATH	125/125L	Calculus II + Lab [SGR #5]	5
Subtotal (non-departmental requirements):			10-14	Subtotal (non-departmental requirements):			10-14
Total (departmental + non-departmental requirements):			50-54	Total (departmental + non-departmental requirements):			50-54
Free Electives			11-20	Free Electives			11-20
Physiology, Cell & Molecular Biology Specialization (30 departmental credits; 16-17 non-departmental credits)				Physiology, Cell & Molecular Biology Specialization (30 departmental credits; 16-17 non-departmental credits)			
Departmental Requirements for specialization				Departmental Requirements for specialization			
Must complete <u>one</u> of the following courses: (3 credit hours)				Must complete the following courses: (6 credit hours)			
BIOL	471	Genetics	3	BIOL	443	Cell Biology	3
BIOL	473	Evolution	3	BIOL	475	Introduction to Molecular Biology	3
				Must complete <u>one</u> of the following physiology courses: (3 credit hours)			
				BIOL	427/427L	Plant Physiology	4
				BIOL	428	Comparative Physiology	3
				BIOL	456	Mammalian Physiology	3
Subtotal (required courses in specialization):			3	Subtotal (required courses in specialization):			9-10
Departmental Distribution Requirements drawn from course groups below:							
Must complete <u>two</u> courses from the Cell & Molecular Course Group):			6	Must complete <u>12</u> credits from the Physiology, Cell & Molecular Course Group:			12
Cell & Molecular Course Group				Delete			
BIOL	425	Cellular Physiology	3	BIOL	425	Cellular Physiology	3
BIOL	441/441L	Histology ¹	3 ³	BIOL	441/441L	Histology ¹	3
BIOL	443	Cell Biology	3	BIOL	443	Cell Biology ²	3
BIOL	475	Introduction to Molecular Biology	3	BIOL	471	Genetics	3
BIOL	483	Developmental Biology	3	BIOL	475/475L	Introduction to Molecular Biology ²	3-4
				BIOL	483	Developmental Biology	3
Subtotal (course group):			6				
Must complete <u>two</u> courses from the Physiology & Structure Course Group:			6-8				
Physiology & Structure Course Group				Delete			
BIOL	426	Endocrinology	3 ³	BIOL	426	Endocrinology	3
BIOL	427/427L	Plant Physiology ¹	4 ²	BIOL	427/427L	Plant Physiology ^{1, 2, 5}	4
BIOL	428/428L	Comparative Physiology ¹	3-4 ³	BIOL	428/428L	Comparative Physiology ^{1, 2}	3-4
BIOL	429	Biology of Reproduction	3 ³	BIOL	429	Biology of Reproduction	3
BIOL	430	Neurobiology	3 ³	BIOL	430	Neurobiology	3
BIOL	432	Behavioral Neuroscience	3 ³	BIOL	432	Behavioral Neuroscience	3
BIOL	433	Environmental Physiology of Animals	3 ³	BIOL	433	Environmental Physiology of Animals	3
BIOL	456	Mammalian Physiology	3 ³	BIOL	456	Mammalian Physiology ²	3
BIOL	481/481L	Vertebrate Anatomy and Embryology ¹	4 ³	BIOL	481/481L	Vertebrate Anatomy and Embryology ¹	4
Subtotal (course group):			6-8	Subtotal (course group):			12
Must complete <u>one</u> course from the Conservation & Ecology or Biodiversity Course Group (3-4 credit hours) [If BIOL 473 is taken as a required specialization course, it does not fulfill this requirement.]				Must complete <u>3</u> credits from the Conservation & Biodiversity Course Group			
Conservation & Ecology Course Group				Delete			
BIOL	310	Environmental Science	3	BIOL	310	Environmental Science	3

BIOL	311/311L	Principles of Ecology ¹	3-4	BIOL	311/311L	Principles of Ecology ¹	4
BIOL	402	Animal Behavior	3 ³	BIOL	402/ 402L	Animal Behavior	4
BIOL	408/408L	Landscape Ecology ¹	3	BIOL	408/408L	Landscape Ecology ¹	3
BIOL	410	Conservation Biology	3	BIOL	410	Conservation Biology	3
BIOL	412/412L	Freshwater Ecology ¹	3	BIOL	412/412L	Freshwater Ecology ¹	3
BIOL	414/414L	Animal Ecology ¹	3 ³	BIOL	414/414L	Animal Ecology ¹	3
BIOL	417/417L	Field Ecology ¹	3	BIOL	417/417L	Field Ecology ^{1,6}	3
BIOL	418	Ecosystem Ecology	3	BIOL	418	Ecosystem Ecology	3
BIOL	419/419L	Plant Ecology ¹	3 ²	BIOL	419/419L	Plant Ecology ^{1,5}	3-4
BIOL	424	Disease Ecology	3	BIOL	424	Disease Ecology	3
BIOL	436	Biogeography	3	BIOL	436	Biogeography	3
BIOL	440/440L	Restoration Ecology ¹	3	BIOL	440/440L	Restoration Ecology ¹	3
BIOL	466	Environmental Toxicology and Contaminants	3	BIOL	466	Environmental Toxicology and Contaminants	3
Biodiversity Course Group				Delete			
BIOL	401/401L	Plant Systematics ¹	4 ²	BIOL	401/401L	Plant Systematics ^{1,5}	4
BIOL	405/405L	Insect Biology ¹	3 ³	BIOL	405/405L	Insect Biology ¹	3
BIOL	407/4 07L	Plants and Civilization	4 ²	BIOL	407/ 407L	Plants and Civilization ⁵	4
BIOL	434/434L	Herpetology ¹	3-4	BIOL	434/434L	Herpetology ¹	4
BIOL	435	Animal Diversity and Evolution	3 ³	BIOL	435	Animal Diversity and Evolution	3
BIOL	452/452L	Comparative Plant Morphology ¹	3 ²	BIOL	452/452L	Comparative Plant Morphology ^{1,5}	3
BIOL	463/463L	Ornithology ¹	3 ³	BIOL	463/463L	Ornithology ¹	3
BIOL	469/469L	Fish Biology ¹	3 ³	BIOL	469/469L	Ichthyology ¹	3
				BIOL	473	Evolution	3
BIOL	485/485L	Invertebrate Paleontology ¹	4				
BIOL	486/486L	Vertebrate Paleontology ¹	4				
Subtotal (course group):			3-4	Subtotal (course group):			3
Must complete one course from the Capstone Group⁴:				Must complete one course from the Capstone Group⁴:			
				BIOL	402/ 402L	Animal Behavior	4
BIOL	417/ 417L	Field Ecology ¹	3	BIOL	417/ 417L	Field Ecology ^{1,6}	3
BIOL	427/ 427L	Plant Physiology ¹	4	BIOL	427/ 427L	Plant Physiology ^{1,5}	4
BIOL	490	Senior Seminar	1	BIOL	490	Senior Seminar	1
BIOL	498	Undergraduate Research ³	2-3	BIOL	498	Undergraduate Research ³	2-3
UHON	498	Undergraduate Research ³	2-3	UHON	498	Undergraduate Research ³	2-3
Subtotal (course group):			1-4	Subtotal (course group):			1-4
¹ Lab courses. All students in the specialization must complete three upper-level Biology Lab courses in addition to BIOL 311/L. ² Course is part of group but is also required for students in this specialization and may therefore not be counted here as a distribution requirement as well. ³ Any 498 course used for a capstone must be approved by the Biology department chair or designee. ⁴ Some capstone courses may also be used for distribution credit for other course groups or to fulfill Lab course requirements.				¹ Lab courses. All students in the specialization must complete three upper-level Biology Lab courses. ² Course is part of group but is also required or may fulfill a physiology requirement for students in this specialization and may, therefore, not be counted as a distribution requirement as well. Physiology courses may count for distribution as long as a different physiology course has completed the physiology requirement. ³ Any 498 course used for a capstone must be approved by the Biology department chair or designee. ⁴ Some capstone courses may also be used for distribution credit for other course groups or to fulfill Lab course requirements. ⁵ Botany course. Students must complete one designated botany course. ⁶ Course may count as botany course with approval of Biology Department chair or designee.			
Electives				Electives			
Any BIOL courses, 300 or 400 level, in addition to those taken to complete specified distribution requirements in Physiology, Cell & Molecular Biology Specialization, for a total of 40 credits in BIOL.			5-11	Any BIOL courses, 300 or 400 level, in addition to those taken to complete specified distribution requirements in Physiology, Cell & Molecular Biology Specialization, for a total of 40 credits in BIOL.			2-6
Subtotal (all departmental requirements for this specialization)			40	Subtotal (all departmental requirements for this specialization)			40
Non-Departmental Requirements for Specialization			19-22	Non-Departmental Requirements for Specialization			18-22

Non-Departmental requirements may also be applied toward a minor or second major.				Non-Departmental requirements may also be applied toward a minor or second major.			
Must complete one of the following course sequences (8 credit hours)				Must complete one of the following course sequences (8 credit hours)			
CHEM	112/112L	General Chemistry I	4	CHEM	112/112L	General Chemistry I	4
CHEM	114/114L	General Chemistry II	4	CHEM	114/114L	General Chemistry II	4
OR				OR			
CHEM	112/112L	General Chemistry I	4	CHEM	112/112L	General Chemistry I	4
CHEM	116/116L	Honors Principles of Chemistry	4	CHEM	116/116L	Honors Principles of Chemistry	4
			Subtotal				Subtotal
			8				8
Must complete one of the following course sequences: (8-9 credit hours)				Must complete one of the following course sequences: (8-9 credit hours)			
CHEM	326/326L	Organic Chemistry I	5	CHEM	326/326L	Organic Chemistry I	5
CHEM	328	Organic Chemistry II	4	CHEM	328	Organic Chemistry II	4
OR				OR			
CHEM	326/326L	Organic Chemistry I	5	CHEM	310/310L	Fundamental Organic Chemistry	4
CHEM	330	Structure and Function of Biomolecules	3	CHEM	330	Organic Chemistry of Biomolecules	3
OR				OR			
CHEM	326/326L	Organic Chemistry I	5	CHEM	310/310L	Fundamental Organic Chemistry	4
CHEM	482	Environmental Chemistry	3	CHEM	482	Environmental Chemistry	3
OR				OR			
CHEM	326/326L	Organic Chemistry I	5	CHEM	310/310L	Fundamental Organic Chemistry	4
CHEM	332	Analytical Chemistry	4	CHEM	332	Analytical Chemistry	4
OR				OR			
CHEM	326/326L	Organic Chemistry I	5	CHEM	310/310L	Fundamental Organic Chemistry	4
BIOC	430	Principles of Biochemistry	3	BIOC	430	Principles of Biochemistry	3
			Subtotal:				Subtotal:
			8-9				7-9
Must complete one of the following Math courses: (3-5 credit hours)				Must complete one of the following Math courses: (3-5 credit hours)			
MATH	102	College Algebra [SGR #5]	3	MATH	102	College Algebra [SGR #5]	3
MATH	115	Precalculus [SGR #5]	5	MATH	115	Precalculus [SGR #5]	5
MATH	120	Trigonometry [SGR #5]	3	MATH	120	Trigonometry [SGR #5]	3
MATH	121	Survey of Calculus [SGR #5]	4	MATH	121	Survey of Calculus [SGR #5]	4
MATH	123/123L	Calculus I + Lab [SGR #5]	5	MATH	123/123L	Calculus I + Lab [SGR #5]	5
MATH	125/125L	Calculus II + Lab [SGR #5]	5	MATH	125/125L	Calculus II + Lab [SGR #5]	5
			Subtotal:				Subtotal:
			3-5				3-5
			Specialization Requirements Total (Departmental + Non-departmental Requirements):				Specialization Requirements Total (Departmental + Non-departmental Requirements):
			59-62				58-62
			Free Electives				Free Electives
			8-11				8-11

				Human Dynamics Specialization (30 departmental credits; 16-17 non-departmental credits)			
				Departmental Requirements for specialization			
				BIOL	471	Genetics	3
				BIOL	420/420L	Intro Biostat/Comput Biol + Lab	3
				BIOL	428/428L	Comparative Physiology + Lab	4
				BIOL	481/481L	Vertebrate Anatomy and Embryology + Lab	4
			Subtotal (required courses in specialization):				15
				Must complete one course from the Capstone Group¹:			
				BIOL	402/402L	Animal Behavior	4
				BIOL	417/417L	Field Ecology	3
				BIOL	427/427L	Plant Physiology	4
				BIOL	490	Senior Seminar	1
				BIOL	498	Undergraduate Research ²	2-3
				UHON	498	Undergraduate Research ²	2-3

					¹ Students in 3+3 program can use a course from PT program as a Capstone course ² Any 498 course used for a capstone must be approved by the Biology department chair or designee.		
					Electives		
					Any BIOL courses, 300 or 400 level, in addition to those taken to complete specified distribution requirements in Human Dynamics Specialization, for a total of 40 credits in BIOL. (This can include 12 designated credits transferred from students participating in 3 + 3 program with USD Doctoral Physical Therapy)	11-14	
					Subtotal (all departmental requirements for this specialization)	40	
					Non-Departmental Requirements for Specialization	17	
					Non-Departmental requirements may also be applied toward a minor or second major.		
					Must complete <u>one</u> of the following Chemistry course sequences (8 credit hours)		
				CHEM	112/112L	General Chemistry I	4
				CHEM	114/114L	General Chemistry II	4
				OR			
				CHEM	112/112L	General Chemistry I	4
				CHEM	116/116L	Honors Principles of Chemistry	4
				Must complete the following Psychology courses (9 cr)			
				PSYC	101	General Psychology	3
				PSYC	321	Human Development Across the Lifespan	3
				PSYC	451	Abnormal Psychology	3
				Subtotal (course group):			9
		The following cross-curricular skill areas, identified in SDBOR policy 2.11, will be addressed in the program of study:				The following cross-curricular skill areas, identified in SDBOR policy 2.11, will be addressed in the program of study:	
		<ul style="list-style-type: none"> • inquiry and analysis • critical and creative thinking • information literacy • teamwork • problem solving 				<ul style="list-style-type: none"> • inquiry and analysis • critical and creative thinking • information literacy • teamwork • problem solving 	
Total number of hours required for major with Conservation & Biodiversity Specialization	50-54			Total number of hours required for major with Conservation & Biodiversity Specialization	50-54		
Total number of hours required for major with Physiology, Cell, and Molecular Biology Specialization	59-62			Total number of hours required for major with Physiology, Cell, and Molecular Biology Specialization	58-62		
				Total number of hours required for major with Human Dynamics Specialization	57		
Total number of hours required for degree	120			Total number of hours required for degree	120		

7. Explanation of the Change:

This will add a new specialization to accompany a new proposed accelerated program into Physical Therapy. The new Human Dynamics specialization enables Biology students to complete the necessary Physical Therapy pre-requisite coursework in three years. It also adjusts requirements for the existing two specializations to align with current course offerings and have more consistent distribution requirements.