

SOUTH DAKOTA BOARD OF REGENTS

Academic and Student Affairs
Consent

AGENDA ITEM: 5 – D (4)
DATE: May 9, 2023

SUBJECT

New Specialization Request – USD – Specialization in Conservation Biology – PhD in Biological Sciences

CONTROLLING STATUTE, RULE, OR POLICY

[BOR Policy 2:23](#) – New Programs, Program Modifications, Curricular Requests and Inactivation/Termination

BACKGROUND / DISCUSSION

The University of South Dakota (USD) requests authorization to offer a specialization in Conservation Biology within the PhD in Biological Sciences program. The proposed specialization builds upon an existing specialization at the MS degree level. USD consistently has several PhD students focused on Conservation Biology, but there was no transcript designation available for doctoral students.

IMPACT AND RECOMMENDATION

USD requests authorization to offer the specialization on campus. USD is not requesting additional state resources to offer the program. No new courses will be required.

Board office staff recommends approval of the program.

ATTACHMENTS

Attachment I – New Specialization Request Form: USD – Conservation Biology – PhD in Biological Sciences

DRAFT MOTION 20230509_5-D(4):

I move to authorize USD to offer a specialization in Conservation Biology within the PhD in Biological Sciences, as presented.



**SOUTH DAKOTA BOARD OF REGENTS
ACADEMIC AFFAIRS FORMS**

New Specialization

UNIVERSITY:	USD
TITLE OF PROPOSED SPECIALIZATION:	Conservation Biology
NAME OF DEGREE PROGRAM IN WHICH SPECIALIZATION IS OFFERED:	PhD, Biological Sciences
INTENDED DATE OF IMPLEMENTATION:	8/1/23
PROPOSED CIP CODE:	26.1307
UNIVERSITY DEPARTMENT:	Biology
BANNER DEPARTMENT CODE:	UBIO
UNIVERSITY DIVISION:	Arts & Sciences
BANNER DIVISION CODE:	2A

X	<p><u>Please check this box to confirm that (place an “X” in the left box):</u></p> <ul style="list-style-type: none"> The individual preparing this request has read AAC Guideline 2.6, which pertains to new specialization requests, and that this request meets the requirements outlined in the guidelines. This request will not be posted to the university website for review of the Academic Affairs Committee until it is approved by the Executive Director and Chief Academic Officer.
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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

3/9/2023

Institutional Approval Signature

Date

President or Chief Academic Officer of the University

1. Level of the Specialization (place an “X” before the specialization):

<input type="checkbox"/>	Baccalaureate	<input type="checkbox"/>	Master’s	<input checked="" type="checkbox"/>	Doctoral
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2. What is the nature/purpose of the proposed specialization? Please include a brief (1-2 sentence) description of the academic field in this specialization.

Conservation Biology focuses on the scientific understanding of plants and animals with a goal of preserving their populations and surrounding habitat. This field is increasingly important with ever increasing landscape alterations.

3. Provide a justification for the specialization, including the potential benefits to students and potential workforce demand for those who graduate with the credential.

For workforce related information, please provide data and examples. Data may include, but are not limited to the South Dakota Department of Labor, the US Bureau of Labor Statistics, Regental system dashboards, etc. Please cite any sources in a footnote.

This specialization builds upon the already existing specialization at the MS level. We consistently have several PhD students focused on Conservation Biology, but there is no designation of this specialization for our doctoral students. A recent Lightcast analysis on this specialization indicates a field that is in consistent demand. While slightly decreasing in occupations over the past 5 years (-2.2%), the field still maintains a higher-than-average number of jobs (5% above the National Average in 2016) with a posting intensity of 2-1. This is on par with other occupations in this region (3-1). As this does not create new coursework, the new designation can help current students garner jobs as they matriculate with no additional burden to the university. There is also the potential to increase recruitment with this specialization being newly offered.

4. List the proposed curriculum for the specialization (including the requirements for completing the major – highlight courses in the specialization):

Prefix	Number	Course Title	Credit Hours	New (yes, no)
PhD, Biological Sciences				
BIOL	520/L	Biostatistics and Lab	3	No
		<i>Or equivalent quantitative course as approved by committee</i>		
BIOL	890	Graduate Seminar in Biology	4-5	No
BIOL	792	Topics in Biology	1	No
BIOL	898D	Dissertation Research in Biology	24-40	No
		Courses as approved by committee	11-40	No
Integrative Biology Specialization (15 credit hours)				
BIOL	725	Integrative Biology	3	No
Sub-Organismal Group		<i>One course from each of the following groups</i>		
BIOL	528	Integrative Physiology	3	No
BIOL	533	Environmental Physiology	3	No
BIOL	543	Cell Biology	3	No
BIOL	543	Mammalian Physiology	3	No
Organismal Group				
BIOL	505	Entomology	3	No
BIOL	534	Herpetology	3	No
BIOL	563	Ornithology	3	No
BIOL	569	Ichthyology	3	No
BIOL	581	Vertebrate Anatomy & Embryology	3	No
Super-Organismal Group				
BIOL	502	Animal Behavior	3	No

Prefix	Number	Course Title	Credit Hours	New (yes, no)
BIOL	510	Conservation Biology	3	No
BIOL	512	Freshwater Ecology	3	No
BIOL	517	Field Ecology	3	No
BIOL	525	Disease Ecology	3	No
BIOL	573	Evolution	3	No
Conservation Biology Specialization (15 credit hours)				
BIOL	711	Foundations of Ecology	3	No
		<i>Or equivalent foundations course as approved by committee</i>		
BIOL	787	Professional Development in Biology	3	No
		<i>Or equivalent course as approved by committee</i>		
		Other courses as approved by committee	9	No
Neuroscience Specialization (15 credit hours from the group below)				
BIOL	530/730	Neurobiology	3	No
BIOL	532 or 732	Behavioral Neuroscience	3	Yes
BIOL	545	Cellular Neuroscience	3	Yes
BIOL	526	Endocrinology	3	Yes
BIOL	792	Topics in Biology (as approved by committee)	1-12	No
NSCI	500	Neuroscience Journal Club	1	No
NSCI	600	Neuroscience Techniques	3	No
NSCI	711	Discoveries in Neuroscience	3	No
NSCI	720	Neurobiology of Disease	3	No
NSCI	731	Medical Neuroscience	6	No
NSCI	792	Special Topics (as approved by committee)	1-6	No

Total number of hours required for completion of specialization
Total number of hours required for completion of major
Total number of hours required for completion of degree

15
72
72

5. Delivery Location

Note: The accreditation requirements of the Higher Learning Commission (HLC) require Board approval for a university to offer programs off-campus and through distance delivery.

A. Complete the following charts to indicate if the university seeks authorization to deliver the entire program on campus, at any off campus location (e.g., UC Sioux Falls, Capital University Center, Black Hills State University-Rapid City, etc.) or deliver the entire specialization through distance technology (e.g., as an on-line program)?

	Yes/No	Intended Start Date
On campus	Yes	8/1/23

	Yes/No	If Yes, list location(s)	Intended Start Date
Off campus	No		

	Yes/No	<i>If Yes, identify delivery methods</i> <i>Delivery methods are defined in AAC</i> <i>Guideline 5.5.</i>	<i>Intended Start Date</i>
Distance Delivery (online/other distance delivery methods)	No		

B. Complete the following chart to indicate if the university seeks authorization to deliver more than 50% but less than 100% of the specialization through distance learning (e.g., as an on-line program)? This question responds to HLC definitions for distance delivery.

	Yes/No	<i>If Yes, identify delivery methods</i>	<i>Intended Start Date</i>
Distance Delivery (online/other distance delivery methods)	No		

6. Additional Information:

Additional information is optional. Use this space to provide pertinent information not requested above. Limit the number and length of additional attachments. Identify all attachments with capital letters. Letters of support are not necessary and are rarely included with Board materials. The University may include responses to questions from the Board or the Executive Director as appendices to the original proposal where applicable. Delete this item if not used.

This seeks to expand the current Conservation Biology specialization from our master’s degree to our PhD degree by utilizing current resources from both the Biology Department and Sustainability. This will serve to increase enrollment in the relevant courses without the need for additional resources.