

SOUTH DAKOTA BOARD OF REGENTS

Academic and Student Affairs
Consent

AGENDA ITEM: 7 – B (2)

DATE: June 27-29, 2017

SUBJECT: New Specializations: USD Conservation and Biodiversity Specialization in the MS in Biology Program

The University of South Dakota (USD) requests authorization to offer a Conservation and Biodiversity specialization within the Master of Science (MS) in Biology program. Specializations within a degree program appear on a transcript and require Board approval.

The proposed specialization concentrates on content knowledge and research in Ecology, Conservation, and Biodiversity. Courses in the subject area will focus on the conservation and variability of, as well as the relationships between, organisms and their environment. USD suggests this program will provide degree holders with a more specific set of marketable skills and competencies compared to an unspecialized M.S. in Biology. The specialization consists of 16 credit hours and requires creation of two new courses.

USD is requesting authorization for on campus delivery of the specialization.

DRAFT MOTION 20170627_7-B(2): I move to approve USD's Conservation and Biodiversity Specialization in the MS in Biology program as described in Attachment I.



SOUTH DAKOTA BOARD OF REGENTS
ACADEMIC AFFAIRS FORMS
New Specialization

UNIVERSITY:	USD
TITLE OF PROPOSED SPECIALIZATION:	Conservation and Biodiversity
NAME OF DEGREE PROGRAM IN WHICH SPECIALIZATION IS OFFERED:	Biology, M.S.
INTENDED DATE OF IMPLEMENTATION:	8/22/2017
PROPOSED CIP CODE:	26.0101
UNIVERSITY DEPARTMENT:	Biology
UNIVERSITY DIVISION:	Arts & Sciences

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

3/20/17

Institutional Approval Signature

Date

President or Chief Academic Officer of the University

1. Level of the Specialization (place an "X" in the appropriate box):

Baccalaureate Master's Doctoral

2. What is the nature/purpose of the proposed specialization?

The proposed specialization in Conservation and Biodiversity to the M.S. in Biology will focus on courses in subjects closely related to Ecology, Conservation, and Biodiversity, and will reflect an area of research interest and strength within the Department of Biology. Ecology is the study of the relationships between organisms and their environments including the physical and biological contexts in which they live. Conservation Biology includes organismal, landscape, and ecosystem ecology and other fields aimed at studying ways to manage resources to maintain biodiversity and functioning ecosystems. The study of biodiversity includes aspects of genetic, taxonomic, and systematic variability and the evolutionary processes which generate and maintain that variability across landscapes, ecosystems, and time.

3. Provide a justification for the specialization, including the potential benefits to students and potential workforce demand for those who graduate with the credential.¹

We are requesting the addition of a Conservation and Biodiversity Specialization to our M.S. graduate offerings. The proposed specialization will highlight the USD Biology faculty's expertise in Conservation Biology to prospective students. One of the goals of the change is to increase our visibility to students looking for a graduate program in this discipline. We also feel that by specifically designating our M.S. students' specialization in conservation and biodiversity we will make them more attractive to federal, state, and non-governmental agency employers in the natural resources and land-management fields. The proposed specialization will indicate a higher level of specificity to potential employers than is suggested by an unspecialized M.S. in Biology and will indicate that graduates have a specific marketable skillset and competencies. The U.S. Bureau of

¹ For workforce related information, please provide data and examples; data sources may include but are not limited to the South Dakota Department of Labor, the US Bureau of Labor Statistics, Regental system dashboards, etc.

Labor Statistics anticipates job growth in Conservation and Biodiversity to be 7% over the next 8 years.² Additionally, the South Dakota Department of Labor and Regulation estimates job growth for Forest and Conservation Workers to be 6.16% over the next 8 years.³

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

Biology, M.S., Conversation and Biodiversity Specialization				
Prefix	Number	Course Title	Credit Hours	New (yes, no)
Core Curriculum				
Choose Plan A or Plan B				
Plan A				
BIOL	790	Graduate Seminar in Biology [^]	2-3	No
BIOL	792	Topics in Biology*	2	No
BIOL	798	Thesis Research	6	No
Total Core Plan A			10-11	
Advisor approved electives in BIOL (BIOL 798-3 additional hours allowed)			0-3	
Conservation and Biodiversity Specialization			16	
Advisor approved supporting courses			0-4	
Plan A subtotal:			30	
Plan B				
BIOL	790	Graduate Seminar in Biology [^]	2-3	No
Total core Plan B			2-3	
Advisor approved electives in BIOL			2-14	
Conservation and Biodiversity Specialization			16	
Advisor approved supporting courses			0-12	
Plan B subtotal:			32	
[^] No more than three cr hrs. of BIOL 790 will count toward the program of study. [*] or NSCI 792/other topics course that will fulfill the two course topics requirement. Topic courses taken under a different prefix will be considered supporting coursework and will not count toward the required credit hours in Biology. ^{**} For plan A, at least 21 of the total 30 cr. required for the degree must be taken with a BIOL prefix. For plan B, at least 20 of the total 32 cr. required for the degree must be taken with a BIOL prefix.				

Biology, M.S., Conversation and Biodiversity Specialization

Required Courses for the Specialization: Conservation and Biodiversity				
BIOL	711	Foundations of Ecology and Conservation	3	Yes
BIOL	787	Professional Development in Biology	3	Yes
BIOL	720/L	Survey of Biostatistical Methods	4	No
Advisory committee approved elective in Biodiversity or Conservation/Ecology			6	No
Required Specialization Subtotal			16	
Total number of hours required for completion of specialization			16	
Total number of hours required for completion of major			30-32	
Total number of hours required for completion of degree			30-32	

² <https://www.bls.gov/ooh/life-physical-and-social-science/conservation-scientists.htm>

³ <https://www.sdvlmi.com/vosnet/analyzer/results.aspx?session=occpj&area=4601000000&timeperiod=20140020240005>

5. Complete the following charts to indicate if the university intends to seek authorization to deliver the entire specialization at any off-campus location (e.g., UC Sioux Falls, Capital University Center, Black Hills State University-Rapid City, etc.) or intends to seek authorization to deliver the entire specialization through distance technology (e.g., as an on-line program)?⁴

	Yes/No	<i>If Yes, list location(s), including the physical address</i>	<i>Intended Start Date</i>
Off-campus	No		

	Yes/No	<i>If Yes, identify delivery methods</i>	<i>Intended Start Date</i>
Distance Delivery	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.*

⁴ The accreditation requirements of the Higher Learning Commission (HLC) require Board approval for a university to offer programs off-campus and through distance delivery.