



SOUTH DAKOTA BOARD OF REGENTS ACADEMIC AFFAIRS FORMS

New Specialization

Use this form to propose a new specialization within an existing degree program. Specializations provide students with an alternative to the primary format of the major or it may be one of several tracks within a broad major. Specializations contain courses within the discipline(s) of the existing program. Specializations appear in the institutional catalog and on the transcript. Majors that offer specializations typically have one-third to two-thirds of the credits in common with the remaining course work fulfilling the requirements of the specialization(s) offered. The Board of Regents, Executive Director, and/or their designees may request additional information about the proposal. After the university President approves the proposal, submit a signed copy to the Executive Director through the system Chief Academic Officer. Only post the New Specialization Form to the university website for review by other universities after approval by the Executive Director and Chief Academic Officer.

UNIVERSITY:	BHSU
TITLE OF PROPOSED SPECIALIZATION:	Forest and Grassland Ecology
NAME OF DEGREE PROGRAM IN WHICH SPECIALIZATION IS OFFERED:	Biology
INTENDED DATE OF IMPLEMENTATION:	8/1/2021
PROPOSED CIP CODE:	03.0502
UNIVERSITY DEPARTMENT:	School of Natural Sciences
BANNER DEPARTMENT CODE:	BSNS
UNIVERSITY DIVISION:	College of Business and Natural Sciences
BANNER DIVISION CODE:	B6

☒ **Please check this box to confirm that:**

- 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.

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.



Institutional Approval Signature
President or Chief Academic Officer of the University



Date

Note: In the responses below, references to external sources, including data sources, should be documented with a footnote (including web addresses where applicable).

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? Please include a brief (1-2 sentence) description of the academic field in this specialization.

Black Hills State seeks to offer a specialization in the west river region where forest resources and employment opportunities are located. There is state and regional demand for graduates with specific knowledge and technical skills necessary to meet workforce needs in agencies and the private sector.

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.

Forestry and related jobs experienced a 1.4% growth from 2009-2019, with an expected decline of 0.2% from 2019-2029 nationally¹, contrasting with a projected 0.4% annual growth in South Dakota through 2026².

The US Forest Service employs over 30,000 individuals, with geographic concentrations matching the distribution of forest resources. Degree programs in forestry, ecology, botany, and biology are preferred. Additional federal and state agencies also hire for a range of professions requiring a specialized bachelor's degree. Wage projections as of 2015 equaled \$58,230 for foresters, with an estimated 8% increase by 2024, in addition to a projected 15,900 job openings due to retirement replacement needs¹.

South Dakota ranks in the highest tier of location quotient of foresters by state (as of May 2019) indicating there is an above average concentration of that profession compared to national levels of employment. Regional states with equally high demand include Montana and Wyoming; the latter does not offer a BS degree program in forestry¹.

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

¹ [U.S. Bureau of Labor Statistics 2020](#)

² [South Dakota Department of Labor & Regulation 2020](#)

Prefix	Number	Course Title (add or delete rows as needed)	Credit Hours	New (yes, no)
		Required Biology Core: students entering the Forest and Grassland Ecology emphasis are exempt from the BIOL 371/L Genetics and BIOL 373/L Evolution requirement		
BIOL	151/L	General Biology I/Lab	4	No
BIOL	153/L	General Biology II/Lab	4	No
BIOL	490	Seminar	2	No
		Forestry Specialization: Required Courses		
BIOL	160	Natural History of the Black Hills	2	Yes
BIOL	311/L	Principles of Ecology/Lab	4	No
BIOL	301/L	Plant Systematics/Lab	4	No
BIOL	360/L	Silviculture & Forest Management/Lab	4	Yes
BIOL	405/L	Entomology/Lab	4	No
BIOL	461/L	Agrostology/Lab	4	No
BIOL	462/L	Dendrology/Lab	4	No
BIOL	460/L	Plant Ecophysiology & Soils/Lab	4	No
MATH	281	Introduction to Statistics	3	No
BIOL	3-400 level	Two upper-division Biology electives	8	No

Total number of hours required for completion of specialization

41

Total number of hours required for completion of major

51

Total number of hours required for completion of degree

120

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) or deliver the entire specialization through distance technology (i.e., as an on-line program)?

	Yes/No	Intended Start Date
On campus	Yes	Fall 2021

	Yes/No	If Yes, list location(s)	Intended Start Date
Off campus	No		Choose an item. Choose an item.

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

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	If Yes, identify delivery methods	Intended Start Date
Distance Delivery (online/other distance delivery methods)	No		Choose an item. Choose an item.

- 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.*

Support for this new specialization was received by Dr. Dennis Hedge, SDSU Provost, via email (June 13, 2020) who stated he had no questions about the proposal, and felt it was “a very logical addition for BHSU”.