

SOUTH DAKOTA BOARD OF REGENTS

Academic and Student Affairs
Consent

AGENDA ITEM: 5 – B (4)
DATE: April 3-4, 2024

SUBJECT

New Specialization Request – USD – Specialization in Science Education – BSEd in Secondary Education

CONTROLLING STATUTE, RULE, OR POLICY

[BOR Policy 2.3.2](#) – New Programs, Program Modifications, and Inactivation/Termination

BACKGROUND / DISCUSSION

The University of South Dakota (USD) requests authorization to offer a specialization in Science Education within the BSEd in Secondary Education program. The proposed specialization aligns coursework to meet the requirements of the integrated sciences teaching endorsement, which will allow students to teach middle and high school courses across multiple disciplines within the sciences (e.g., biology, physical sciences, life science, earth science). This will provide additional pathways for students interested in becoming a science teacher, which is a high demand area.

IMPACT AND RECOMMENDATION

USD requests authorization to offer the specialization on campus and through hybrid delivery. 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 – Science Education – Secondary Education (BSEd)

DRAFT MOTION 20240403_5-B(4):

I move to authorize USD to offer a specialization in Science Education within the BSEd in Secondary Education program, as presented.



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:	USD
TITLE OF PROPOSED SPECIALIZATION:	Science Education Specialization
NAME OF DEGREE PROGRAM IN WHICH SPECIALIZATION IS OFFERED:	Secondary Education, Bachelor of Science in Education (BSED)
INTENDED DATE OF IMPLEMENTATION:	5/13/2024-Summer 2024
PROPOSED CIP CODE:	13.1316
UNIVERSITY DEPARTMENT:	Teacher Residency & Education
BANNER DEPARTMENT CODE:	UCIN
UNIVERSITY DIVISION:	School of Education
BANNER DIVISION CODE:	2E

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 2.3.2.2.B, 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.

<i>Elizabeth M. Freeburg</i>	12/4/2023
Institutional Approval Signature	Date
<i>President or Chief Academic Officer of the University</i>	

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" before the specialization):

<input checked="" type="checkbox"/>	Baccalaureate	<input type="checkbox"/>	Master's	<input type="checkbox"/>	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.

We are seeking to create a new specialization in the Secondary Education BSED program: Science Education. Currently, this degree program has a Biology Education specialization that prepares students for the advanced biology endorsement in the State of South Dakota, which authorizes program completers to teach middle and high school courses related to the biological sciences. Through this new specialization in Science Education, we have aligned coursework to meet the requirements of the integrated sciences endorsement, which will allow students to teach middle and high school courses across multiple disciplines within the sciences (e.g., biology, physical science, life science, earth science). We believe this will provide additional pathways for students interested in becoming a science teacher, which is a specific teaching area with a very high demand for new teachers but is regularly low enrolled. We are also hoping this will recruit additional students into the program.

Given the scope of this proposed specialization in the Secondary Education BSED program, we have reviewed all program requirements with colleagues in the College of Arts and Sciences to ensure quality control.

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

There is currently a teacher shortage in South Dakota and throughout the nation. According to the Associated School Boards of South Dakota, there were at least 180 open teaching positions at the start of the 2023-24 school year¹. According to the US Department of Education's Teacher Shortage Areas report, South Dakota has had a shortage of science teachers nearly every year since 2004 at the secondary level, and at all levels since 2019². One of the main benefits to students with this new specialization will be that students can have greater flexibility in the science courses they enroll and will have greater flexibility in the science courses they eventually teach upon entering the teaching profession. We hope that this program will draw more students into the program and, therefore, position USD to better meet the very high demand for science teachers.

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

Specialization Requirements (31 hours)

Prefix	Number	Course Title	Credit Hours	New (yes, no)
BIOL	151	General Biology I (C) [SGR #6, HSDC]	3	No
BIOL	151L	General Biology I Lab (C) [SGR #6, HSDC]	1	No
BIOL	153	General Biology II (C) [SGR #6, HSDC]	3	No
BIOL	153L	General Biology II Lab (C) [SGR #6, HSDC]	1	No
CHEM	112	General Chemistry I (C) [SGR #6, HSDC]	3	No
CHEM	112L	General Chemistry I Lab (C) [SGR #6, HSDC]	1	No
CHEM	114	General Chemistry II (C) [SGR #6, HSDC]	3	No
CHEM	114L	General Chemistry II Lab (C) [SGR #6, HSDC]	1	No
PHYS	111	Introduction to Physics I (C)	3	No
PHYS	111L	Introduction to Physics I Laboratory (C)	1	No

¹ <https://www.dakotane.wsnewsnow.com/2023/08/07/over-180-open-teaching-positions-statewide-down-last-year/>

² <https://tsa.ed.gov/#/reports>

Prefix	Number	Course Title	Credit Hours	New (yes, no)
PHYS	113	Introduction to Physics II (C)	3	No
PHYS	113L	Introduction to Physics II Laboratory (C)	1	No
ESCI	101	Dynamic Earth	4	No
ESCI	101L	Dynamic Earth Laboratory	0	No
Choose one of the following courses and lab:				
PHYS	185	Solar System Astronomy (C)	2	No
PHYS	185L	Solar System Astronomy Laboratory (C)	1	No
PHYS	187	Stars, Galaxies, and Cosmology (C)	2	No
PHYS	187L	Stars, Galaxies, and Cosmology Laboratory (C)	1	No
Science Education Specialization Total			31	

Specialization Electives (13 hours)

Prefix	Number	Course Title	Credit Hours	New (yes, no)
XXX	XXX	Students must complete specialization electives in the Life/Biological Sciences, Physical Sciences, Chemistry, Earth and Space Science, including the following prefixes: BIOL, CHEM, ESCI, HSC, ISCI, MTRO, PHGY, PHYS, SUST.	13	No
Science Education Specialization Electives Total			13	

Non-departmental Requirements (13 hours)

Prefix	Number	Course Title	Credit Hours	New (yes, no)
ENGL	210	Introduction to Literature (C) [SGR #4, HSDC]	3	No
SEED	400	Methods and Media in Middle/High School (C)	2	No
SEED	413	7-12 Science Methods (C)	3	No
TET	200	Technology to Improve Learning	2	No
TET	400	Methods in Educational Technology & Media (Must be taken during Residency Year)	3	No
Science Education Non-departmental Requirements Total			13	

Total number of hours required for completion of major core	35
Total number of hours required for completion of specialization	57 (31+13+13)
Total number of hours required for completion of major	92
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, etc.) or deliver the entire specialization through distance technology (e.g., as an on-line program)?

	Yes/No	Intended Start Date
On campus	Yes	Fall 2024/Summer 2024

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

	Yes/No	If Yes, identify delivery methods <i>Delivery methods are defined in AAC Guideline 2.4.3.B.</i>	Intended Start Date
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	If Yes, identify delivery methods	Intended Start Date
Distance Delivery (online/other distance delivery methods)	Yes	online	Fall 2024/Summer 2024

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.