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| S:\Communications\Logos and photos\SDBORLogos\final_sdbor_webreadyBW_trans.gif | **SOUTH DAKOTA BOARD OF REGENTS**  ACADEMIC AFFAIRS FORMS |
| New Specialization |
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| --- | --- |
| **UNIVERSITY:** | DSU |
| **TITLE OF PROPOSED SPECIALIZATION:** | **Biology Education** |
| **NAME OF DEGREE PROGRAM IN WHICH SPECIALIZATION IS OFFERED:** | **B.S. in Biology** |
| **INTENDED DATE OF IMPLEMENTATION:** | **5/10/2021** |
| **PROPOSED CIP CODE:** | **26.9999** |
| **UNIVERSITY DEPARTMENT:** | **College of Arts and Science - DAS** |
| **BANNER DEPARTMENT CODE:** | **DSCI** |
| **UNIVERSITY DIVISION:** | **DAS** |
| **BANNER DIVISION CODE:** | **DSCI** |

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

* The individual preparing this request has read [AAC Guideline 2.6](https://www.sdbor.edu/administrative-offices/academics/academic-affairs-guidelines/Documents/2_Guidelines/2_6_Guideline.pdf), 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.*

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|  |  | 2/23/2021 |
| Institutional Approval Signature  *President or Chief Academic Officer of the University* |  | Date |

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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 |  |

1. **What is the nature/purpose of the proposed specialization? Please include a brief (1-2 sentence) description of the academic field in this specialization.**

The university is proposing to combine the Bachelor of Science in Biology and the Bachelor of Science in Biology Education majors, take the existing courses and package them into a 21-hour core and two specializations (Integrated Biology or English Education). The goal of the specialization in Biology Education is to prepare graduates to teach biology in secondary schools. All DSU student education graduates complete a K-12 Educational Technology Endorsement.

1. **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 is the current Biology Education major offered by Dakota State University.  Instead of having two different undergraduate Biology programs, DSU is proposing to combine the two programs under one umbrella.   Enrollment numbers for Biology Education range from 2-5 over the last 5 years.  Science education is a consistent need within the state of South Dakota. According to the BOR Fact Books only 10 Biology/Biology teachers were awarded degrees in FY20 and only 4 the year before. South Dakota Occupational Employment Projections for 2019-2021 project a 3.9% job growth with a total of 16 annual openings in the state of South Dakota.1

1 <https://dlr.sd.gov/lmic/menu_projections.aspx>

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

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Prefix** | **Number** | **Course Title**  *(add or delete rows as needed)* | | **Credit Hours** | **New**  **(yes, no)** |
| **Biology Component** | | | | **11** |  |
| BIOL | 325 | Physiology | | 4 | no |
| BIOL | 325L | Physiology Lab | | 0 | no |
| Choose 7 credits from the following: | | | | 7 |  |
| BIOL | 335 | Introduction to Bioinformatics | | 3 | no |
| BIOL | 343 | Cell and Molecular Biology | | 4 | no |
| BIOL | 343L | Cell and Molecular Biology Lab | | 0 | no |
| BIOL | 365 | Vertebrate Zoology | | 4 | no |
| BIOL | 365L | Vertebrate Zoology | | 0 | no |
| BIOL | 410 | Conservation Biology | | 3 | no |
| BIOL | 422 | Immunology | | 3-4 | no |
| BIOL | 442L | Immunology Lab | | 0-1 | no |
| BIOL | 450 | Aquatic Biology | | 4 | no |
| BIOL | 450L | Aquatic Biology Lab | | 0 | no |
| BIOL | 492 | Topics \* | | 1-4 | no |
| \* May be repeated provided student does not enroll in the same topics courses. | | | |  |  |
|  |  |  | |  |  |
| **Chemistry Component** | | | | **8** |  |
| CHEM | 112 | General Chemistry | | 4 | no |
| CHEM | 112L | General Chemistry Lab | | 0 | no |
| CHEM | 114 | General Chemistry II | | 4 | no |
| CHEM | 114L | General Chemistry II Lab | | 0 | no |
|  |  |  | |  |  |
| **Computer Technology Component** | | | | **12** |  |
| CSC | 105 | Introduction to Computers | | 3 | no |
| CIS  CIS  CSC | 123  130  150 | Problem Solving & Programming OR  Visual Basic Programming OR  Computer Science OR | | 3 | no |
| CIS | 350 | Computer Hardware, Data Comm & Networking | | 3 | no |
| BIOL | 303 | Introduction to Biological Instrumentation | | 3 | no |
|  |  |  | |  |  |
| **Professional Education** | | | | **28** |  |
| All Professional Education courses must be completed with a “C” or better. 1- Completed prior to admission to Teacher Education | | | |  |  |
| EDFN | 338 | Foundations of American Ed | | 2 1 | no |
| EPSY | 302 | Educational Psychology | | 3 1 | no |
| SEED | 295 | Practicum | | 1 1 | no |
| SPED | 100 | Intro to Persons with Exceptionalities | | 3 1 | no |
| Admission to the Teacher Education Program is required for the remaining courses. | | | |  |  |
| EDFN | 475 | Human Relations | | 3 1 | no |
| SEED | 302 | Secondary/Middle Content Area: Major | | 2 | no |
| SEED | 401 | Methods of Educational Technology | | 1 | no |
| SEED | 440 | Classroom Management | | 2 | no |
| SEED | 450 | Reading and Content Literacy | | 3 | no |
| SEED | 488 | 7-12 Student Teaching | | 8 | no |
| Total number of hours required for completion of specialization | | |  | 59 |
| Total number of hours required for completion of major | | |  | 80 |
| Total number of hours required for completion of degree | | |  | 120 |

1. **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., USD Community College for Sioux Falls, Black Hills State University-Rapid City, Capital City Campus etc.) or deliver the entire specialization through distance technology (e.g., as an on-line program)?**

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| --- | --- | --- |
|  | **Yes/No** | ***Intended Start Date*** |
| **On campus** | Yes | **Fall 2021** |

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

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|  | **Yes/No** | ***If Yes, identify delivery methods***  *Delivery methods are defined in* [*AAC Guideline 5.5*](https://www.sdbor.edu/administrative-offices/academics/academic-affairs-guidelines/Documents/5_Guidelines/5_5_Guideline.pdf)*.* | ***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. |