



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

Substantive Program Modification Form

UNIVERSITY:	SDSU
CURRENT PROGRAM DEGREE:	B.S.
CURRENT PROGRAM MAJOR/MINOR:	Physics
CURRENT SPECIALIZATION:	Science Teaching Specialization
CIP CODE:	40.0801 – Major CIP 13.1316 – Specialization CIP
UNIVERSITY DEPARTMENT:	Department of Chemistry, Biochemistry, and Physics
BANNER DEPARTMENT CODE:	SCBP
UNIVERSITY COLLEGE:	College of Natural Sciences
BANNER COLLEGE CODE:	3T

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.

Dennis D. Hedge

Vice President of Academic Affairs or
President of the University

2/13/2025

Date

1. This modification addresses a change in:

- | | |
|---|---|
| <input type="checkbox"/> Total credits required within the discipline | <input checked="" type="checkbox"/> Total credits of supportive course work |
| <input checked="" type="checkbox"/> Total credits of elective course work | <input type="checkbox"/> Total credits required for program |
| <input type="checkbox"/> Program name | <input checked="" type="checkbox"/> Existing specialization |
| <input type="checkbox"/> CIP Code | <input checked="" type="checkbox"/> Other: Academic Requirements |
| <input type="checkbox"/> Modification requiring Board of Regents approval | |

Must have prior approval from Executive Director or designee

2. Effective date of change: 2025-2026 Academic Year

3. Program Degree Level:

Associate Bachelor's Master's Doctoral

4. Category:

Certificate Specialization Minor Major

5. If a name change is proposed, the change will occur:

- On the effective date for all students
- On the effective date for students new to the program (enrolled students will graduate from existing program)

Proposed new name:

6. Is the program being modified associated with a current articulation agreement?

Yes No

a. If yes, will the articulation agreement need to be updated with the partner institution following the approve of the program change? Please explain: N/A

7. Primary Aspects of the Modification:

Existing Curriculum

Proposed Curriculum (highlight changes)

Pref.	Num.	Title	Cr. Hrs	Pref.	Num.	Title	Cr. Hrs.
Systems General Education Requirements			22	Systems General Education Requirements			22
Systems General Education Requirements - Electives			18	Systems General Education Requirements - Electives			18
		SGR 1 – Written Communication	3			SGR 1 – Written Communication	3
		SGR 1 – Written Communication	3			SGR 1 – Written Communication	3
		SGR 2 – Oral Communication	3			SGR 2 – Oral Communication	3
		SGR 3 – Social Sciences	3			SGR 3 – Social Sciences	3
		SGR 4 – Arts and Humanities	3			SGR 4 – Arts and Humanities	3
		SGR 4 – Arts and Humanities	3			SGR 4 – Arts and Humanities	3
System General Education Requirements - Required			4	System General Education Requirements - Required			4
AIS	211	South Dakota American Indian Culture and Education (SGR 3) (Teaching Specialization Requirement)	--	AIS	211	South Dakota American Indian Culture and Education (SGR 3) (Teaching Specialization Requirement)	--
MATH	123	Calculus I	4	MATH	123	Calculus I	4
PHYS AND PHYS	211-211L 213-213L	University Physics I & Lab (4,1) (SGR #6) (Major Requirement) University Physics II & Lab (4,1) (SGR #6) (Major Requirement)	--	PHYS AND PHYS	211-211L 213-213L	University Physics I & Lab (4,1) (SGR #6) (Major Requirement) University Physics II & Lab (4,1) (SGR #6) (Major Requirement)	--
Major Requirements			57	Major Requirements			57
Major Core			51	Major Core			51
CHEM	112	General Chemistry I (SGR #6)	3	CHEM	112	General Chemistry I (SGR #6)	3
CHEM	112L	General Chemistry I Lab (SGR #6)	1	CHEM	112L	General Chemistry I Lab (SGR #6)	1
CHEM	114	General Chemistry II (SGR #6)	3	CHEM	114	General Chemistry II (SGR #6)	3
CHEM	114L	General Chemistry II Lab (SGR #6)	1	CHEM	114L	General Chemistry II Lab (SGR #6)	1
EE	216	Linear Circuits I & Lab	3	EE	216	Linear Circuits I & Lab	3
EE	216L	Linear Circuits I Lab	1	EE	216L	Linear Circuits I Lab	1
MATH	125	Calculus II (SGR # 5)	4	MATH	125	Calculus II	4
MATH	225	Calculus III (SGR #5)	4	MATH	225	Calculus III (SGR #5)	4
MATH	321	Differential Equations	3	MATH	321	Differential Equations	3
PHYS	119	First Year Seminar in Physics	1	PHYS	119	First Year Seminar in Physics	1
PHYS	211	University Physics I (SGR #6)	4	PHYS	211	University Physics I (SGR #6)	4
PHYS	211L	University Physics I Lab (SGR #6)	1	PHYS	211L	University Physics I Lab (SGR #6)	1
PHYS	213	University Physics II (SGR #6)	4	PHYS	213	University Physics II (SGR #6)	4
PHYS	213L	University Physics II Lab (SGR #6)	1	PHYS	213L	University Physics II Lab (SGR #6)	1
PHYS	316	Measurement Theory and Experimental Design	1	PHYS	316	Measurement Theory and Experimental Design	1
PHYS	316L	Measurement Theory and Experimental Design Lab	1	PHYS	316L	Measurement Theory and Experimental Design Lab	1
PHYS	331	Introduction to Modern Physics	3	PHYS	331	Introduction to Modern Physics	3
PHYS	341	Thermodynamics	2	PHYS	341	Thermodynamics	2
PHYS	343	Statistical Physics	2	PHYS	343	Statistical Physics	2
PHYS	421	Electromagnetism	4	PHYS	421	Electromagnetism	4
PHYS	437	Foundations of Health Physics	3	PHYS	437	Foundations of Health Physics	3
PHYS	451	Classical Mechanics	4	PHYS	451	Classical Mechanics	4
Science Teaching Specialization Requirements			6	Science Teaching Specialization Requirements			6
PHYS OR PHYS	185-185L 187-187L	Astronomy I and Lab (2,1) Astronomy II and Lab (2,1)	3	PHYS OR PHYS	185-185L 187-187L	Astronomy I and Lab (2,1) Astronomy II and Lab (2,1)	3
Teaching Specialization Requirements			37	Teaching Specialization Requirements			40
AIS	211	South Dakota American Indian Culture and Education (SGR 3)	3	AIS	211	South Dakota American Indian Culture and Education (SGR 3)	3
EDFN	101	Exploration of Teaching & Learning	1	EDFN	101	Exploration of Teaching & Learning	1
				EDFN	102	Introduction to Teaching	3

Existing Curriculum

Proposed Curriculum (*highlight changes*)

Pref.	Num.	Title	Cr. Hrs	Pref.	Num.	Title	Cr. Hrs.
EDFN	340	Adolescent Development in Educational Contexts	3	EDFN	340	Adolescent Development in Educational Contexts	3
EDFN	351	Teaching & Learning I	1	EDFN	351	Teaching & Learning I	1
EDFN	352	Teaching & Learning II	3	EDFN	352	Teaching & Learning II	3
EDFN	352L	Teaching & Learning II Lab	2	EDFN	352L	Teaching & Learning II Lab	2
EDFN	453	Teaching & Learning III	3	EDFN	453	Teaching & Learning III	3
EDFN	453L	Teaching & Learning III Lab	4	EDFN	453L	Teaching & Learning III Lab	4
EDFN	454	Teaching & Learning IV	11	EDFN	454	Teaching & Learning IV	11
SEED	413	7-12 Science Methods	3	SEED	413	7-12 Science Methods	3
SEED	450	7-12 Reading and Content Literacy	2	SEED	450	7-12 Reading and Content Literacy	2
SEED	456	Capstone/Action Research	1	SEED	456	Capstone/Action Research	1
				SPED	100	Introduction to Persons with Exceptionalities	3
Electives (Taken as needed to complete any additional degree requirements)			4	Electives (Taken as needed to complete any additional degree requirements)			1
Summary of Credits Physics (B.S.) – Science Teaching Specialization							
System General Education Requirements			22	System General Education Requirements			22
Majors Requirements			57	Majors Requirements			57
Teaching Specialization Requirements			37	Teaching Specialization Requirements			40
Electives (Taken as needed to complete any additional degree requirements)			4	Electives (Taken as needed to complete any additional degree requirements)			1
Total number of hours required for specialization			98	Total number of hours required for specialization			101
Total number of hours required for degree			120	Total number of hours required for degree			120

Academic Requirements*Current:*

- The program requires a cumulative GPA of 2.0 or above for all physics courses and a GPA 2.0 or above in PHYS 211-213 (or PHYS 111-113) and PHYS 331.
- A grade of “C” or better is required in CMST 101, ENGL 101, PSYC 101, and MATH 103 or higher (if these courses are in your plan of study), and all courses for the major (classes with department/program prefix).
- An overall GPA of 2.5 is required to enroll in any education courses.

Proposed:

- The program requires a cumulative GPA of 2.0 or above for all physics courses and a GPA 2.0 or above in PHYS 211-213 (or PHYS 111-113) and PHYS 331.
- A grade of “C” or better is required in education coursework (classes with AIS, EDFN, SPED, or SEED prefixes).
- An overall GPA of 2.5 is required.
- A GPA of 2.7 is required in both major and education courses.

Acceptance into Teacher Education

- A grade of “C” or better is required in education coursework (classes with AIS, EDFN, SPED, or SEED prefixes).
- An overall GPA of 2.5 is required.
- A GPA in the academic major of 2.6 is required.
- Completion of program application and professional licensure location form.

Acceptance into Residency I

- A grade of “C” or better is required in education coursework (classes with AIS, EDFN, SPED, or SEED prefixes).
- An overall GPA of 2.5 is required.
- A GPA of 2.7 is required in both major and education courses.
- The teacher candidate must take the Praxis content exam.
- The teacher candidate is also required to complete a criminal background check with field placements, a

TB test with negative reading, and CPR and first aid certification.

Acceptance into Residency II

- A grade of “C” or better is required in education coursework (classes with AIS, EDFN, SPED, or SEED prefixes).
- An overall GPA of 2.5 is required.
- A GPA of 2.7 is required in both major and education courses.
- The teacher candidate must take the Praxis PLT exam.

8. Explanation of the Change:

In August 2024, the SDBOR approved the Gateway to Teacher Education Certificate. This 12-credit certificate provides a jumpstart for South Dakota high school students with a career interest in PK-12 teacher education and provides knowledge about teacher education degree programs within South Dakota Regental Institutions. In addition to six credits towards their general education requirements, students will complete EDFN 102 Introduction to Teaching (3 cr.) and SPED 100 Introduction to Persons with Exceptionalities (3 cr.). The certificate is intended to be stackable with elementary, secondary, and special education programs. The Physics – Science Teaching Specialization has been revised to incorporate EDFN 102 and SPED 100. EDFN 102 has replaced EDFN 101 Exploration of Teaching & Learning (1 cr.) and EDFN 352L Teaching & Learning II Lab (3 cr.). General electives were offset by three credits to offset the addition of SPED 100 in the program requirements.

Changes to academic requirements stem from changes to state level certification requirements. Language has been updated to reflect how students in teacher education programs progress through their program requirements toward graduation.