



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

Substantive Program Modification Form

UNIVERSITY:	SDSU
CURRENT PROGRAM DEGREE:	Ph.D.
CURRENT PROGRAM MAJOR/MINOR:	Biochemistry
CURRENT SPECIALIZATION:	N/A
CIP CODE:	26.0202
UNIVERSITY DEPARTMENT:	Chemistry, Biochemistry and Physics
BANNER DEPARTMENT CODE:	SCBP
UNIVERSITY COLLEGE:	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

3/26/2025

Vice President of Academic Affairs or
President of the University

Date

1. This modification addresses a change in:

- | | |
|--|--|
| <input checked="" type="checkbox"/> Total credits required within the discipline | <input 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 type="checkbox"/> Existing specialization |
| <input type="checkbox"/> CIP Code | <input type="checkbox"/> Other |
| <input type="checkbox"/> Modification requiring Board of Regents approval
<i>Must have prior approval from Executive Director or designee</i> | |

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:

<i>Existing Curriculum</i>				<i>Proposed Curriculum (highlight changes)</i>			
Pref.	Num.	Title	Cr. Hrs.	Pref.	Num.	Title	Cr. Hrs.
60 credit plan			60	60 credit plan			60
CHEM	790	Seminar (Research)	2	CHEM	790	Seminar (Research)	2
		CHEM 898D Dissertation (minimum of 18 credits) and/or other coursework as required by Graduate Student Advisory Committee	58			CHEM 898D Dissertation (minimum of 18 credits) and/or other coursework as required by Graduate Student Advisory Committee	58
90 credit plan			90	90 credit plan			90
BIOL	743	Cell Biology	3	BIOL	743	Cell Biology	3
BIOS	662	Advanced Molecular and Cellular Biology	3	BIOS	662	Advanced Molecular and Cellular Biology	3
CHEM	548	Biophysical Chemistry	3	CHEM	548	Biophysical Chemistry	3
CHEM	705	Principles of Biochemistry	3	CHEM	705	Principles of Biochemistry	3
				CHEM	707	Chemical Communication Skills	2
CHEM	760	Laboratory Rotations	2	CHEM	760	Laboratory Rotations	2
CHEM	790	Seminar	3	CHEM	790	Seminar	3
CHEM	898D	Dissertation	63	CHEM	898D	Dissertation	64
GSR	601	Research Regulation Compliance	1	GSR	601	Research Regulation Compliance	1
		Electives Courses may be selected from STEM disciplines (e.g. BIOL, BIOS, CHEM, MATH, or STAT prefixes)	9			Elective Coursework Courses must be selected from STEM disciplines	6
Total number of hours required for degree			60-90	Total number of hours required for degree			60-90

8. Explanation of the Change:

The Department of Chemistry, Biochemistry and Physics has requested the following changes to the Ph.D. in Biochemistry:

- Faculty voted to add CHEM 707 Chemical Communication Skills to the program because the oral examination involves students developing and writing an original research proposal and defending it orally. This course prepares students for this step in their candidacy by providing training in searching for the literature and techniques of written and oral communication useful for preparing their proposal. This class was already required for the Chemistry Ph.D. so the addition of it to the Biochemistry Ph.D. also aligns the degree requirements for both Ph.D. programs in the department.
- The change in the number of elective credits from 9 to 6 was made in part to account for the additional CHEM 707 course, but also to provide more flexibility. Students are allowed to exceed the minimum requirement of 6 credits of electives if agreed upon by the student and their Graduate Student Advisory Committee.
- The number of dissertation credits was adjusted to maintain 90 total credits in the program.