



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

**Substantive Program Modification Form**

<b>UNIVERSITY:</b>	<b>SDSU</b>
<b>CURRENT PROGRAM DEGREE:</b>	<b>B.S.</b>
<b>CURRENT PROGRAM MAJOR/MINOR:</b>	<b>Food Science</b>
<b>CURRENT SPECIALIZATION:</b>	<b>N/A</b>
<b>CIP CODE:</b>	<b>01.1001</b>
<b>UNIVERSITY DEPARTMENT:</b>	<b>Dairy and Food Science</b>
<b>BANNER DEPARTMENT CODE:</b>	<b>SDFS</b>
<b>UNIVERSITY COLLEGE:</b>	<b>Agriculture, Food and Environmental Sciences</b>
<b>BANNER COLLEGE CODE:</b>	<b>3F</b>

**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

2/13/2025

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: Academic Requirements            |
| <input type="checkbox"/> Modification requiring Board of Regents approval<br><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:**

## 7. Primary Aspects of the Modification:

*Existing Curriculum*

*Proposed Curriculum (highlight changes)*

Pref.	Num.	Title	Cr. Hrs.	Pref.	Num.	Title	Cr. Hrs.
<b>Systems General Education Requirements</b>				<b>Systems General Education Requirements</b>			
			<b>32</b>				<b>32</b>
<b>Systems General Education Requirements – Electives</b>				<b>Systems General Education Requirements – Electives</b>			
			<b>15</b>				<b>18</b>
		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
						<b>SGR #3 – Social Sciences</b>	<b>3</b>
		SGR #4 – Arts and Humanities	3			SGR #4 – Arts and Humanities	3
		SGR #4 – Arts and Humanities	3			SGR #4 – Arts and Humanities	3
<b>Systems General Education Requirements – Required</b>				<b>Systems General Education Requirements – Required</b>			
			<b>17</b>				<b>14</b>
ECON OR ECON	201 202	Principles of Microeconomics (3) (SGR #3) (recommended) Principles of Macroeconomics (3) (SGR #3)	3	ECON OR ECON	201 202	Principles of Microeconomics (3) (SGR #3) (recommended) Principles of Macroeconomics (3) (SGR #3)	3
ABS	203	Global Food Systems (SGR #3)	3	<b>ABS</b>	<b>203</b>	<b>Global Food Systems (SGR #3)</b>	<b>3</b>
STAT	281	Introduction to Statistics (SGR #5)	3	STAT	281	Introduction to Statistics (SGR #5)	3
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
<b>Major Requirements</b>				<b>Major Requirements</b>			
			<b>51</b>				<b>51</b>
AGEC	366	Food Law	3	AGEC	366	Food Law	3
AS OR DS	241-241L 231	Introduction to Meat Science & Lab (2,1) Dairy Foods (3)	3	AS OR DS	241-241L 231	Introduction to Meat Science & Lab (2,1) Dairy Foods (3)	3
AST	443	Food Processing & Engineering Fundamentals	2	AST	443	Food Processing & Engineering Fundamentals	2
AST	443L	Food Processing & Engineering Fundamentals Lab	1	AST	443L	Food Processing & Engineering Fundamentals Lab	1
DS	119	First Year Seminar – Dairy and Food Science	2	<b>DS</b>	<b>119</b>	<b>Opportunities in Dairy and Food Science</b>	<b>1</b>
				<b>DS</b>	<b>120</b>	<b>Survey of Dairy and Food Science Industries</b>	<b>1</b>
DS	421	Dairy Plant Management	3	DS	421	Dairy Plant Management	3
DS	421L	Dairy Plant Management Lab	1	DS	421L	Dairy Plant Management Lab	1
DS	490	Seminar	1	DS	490	Seminar	1
DS	496	Field Experience	3	DS	496	Field Experience	3
FS	101	Introduction to Food Science	3	FS	101	Introduction to Food Science	3
FS	251	Food Safety Management Systems	3	FS	251	Food Safety Management Systems	3
FS	341	Advanced Food Science	3	FS	341	Advanced Food Science	3
FS	341L	Advanced Food Science Lab	1	FS	341L	Advanced Food Science Lab	1
FS	351	Principles of Food Processing	2	FS	351	Principles of Food Processing	2
FS	351L	Principles of Food Processing Lab	1	FS	351L	Principles of Food Processing Lab	1
FS	400	Food Chemistry and Analysis	3	FS	400	Food Chemistry and Analysis	3
FS	400L	Food Chemistry and Analysis Lab	2	FS	400L	Food Chemistry and Analysis Lab	2
FS	451	New Food Product Development	3	FS	451	New Food Product Development	3
FS	451	New Food Product Development Lab	1	FS	451	New Food Product Development Lab	1
FS OR FS	494 498	Internship Undergraduate Research	3	FS OR FS	494 498	Internship Undergraduate Research	3
MICR	311	Food Microbiology	4	MICR	311	Food Microbiology	2
MICR	311L	Food Microbiology Lab	0	MICR	311L	Food Microbiology Lab	2
NUTR	315	Human Nutrition	3	NUTR	315	Human Nutrition	3
<b>Supporting Coursework</b>				<b>Supporting Coursework</b>			
			<b>35-36</b>				<b>27-28</b>
BIOL	151	General Biology I	3	BIOL	151	General Biology I	3
BIOL	151L	General Biology I Lab	1	BIOL	151L	General Biology I Lab	1
BIOL	153	General Biology II	3	<b>BIOL</b>	<b>153</b>	<b>General Biology II</b>	<b>3</b>

## Existing Curriculum

## Proposed Curriculum (highlight changes)

Pref.	Num.	Title	Cr. Hrs.	Pref.	Num.	Title	Cr. Hrs.
BIOL	153L	General Biology II Lab	1	<del>BIOL</del>	<del>153L</del>	<del>General Biology II Lab</del>	<del>1</del>
CHEM	326	Organic Chemistry I	3	CHEM	326	Organic Chemistry I	3
CHEM	326L	Organic Chemistry I Lab	1	CHEM	326L	Organic Chemistry I Lab	1
CHEM	328	Organic Chemistry II	3	CHEM	328	Organic Chemistry II	3
CHEM	328L	Organic Chemistry II Lab	1	CHEM	328L	Organic Chemistry II Lab	1
CHEM	464	Biochemistry I	3	CHEM	464	Biochemistry I	3
MATH OR MATH	121-121L	Survey of Calculus & Lab (4,1)	4-5	MATH OR MATH	121-121L	Survey of Calculus & Lab (4,1)	4-5
MATH	123	Calculus I (4)		MATH	123	Calculus I (4)	
MICR	231	General Microbiology	4	MICR	231	General Microbiology	4
MICR	231L	General Microbiology Lab	0	MICR	231L	General Microbiology Lab	0
PHYS	111	Introduction to Physics I	3	PHYS	111	Introduction to Physics I	3
PHYS	111L	Introduction to Physics I Lab	1	PHYS	111L	Introduction to Physics I Lab	1
PHYS	113	Introduction to Physics II	3	<del>PHYS</del>	<del>113</del>	<del>Introduction to Physics II</del>	<del>3</del>
PHYS	113L	Introduction to Physics II Lab	1	<del>PHYS</del>	<del>113L</del>	<del>Introduction to Physics II Lab</del>	<del>1</del>
STAT	281	Introduction to Statistics (3) (SGR 5)	-	STAT	281	Introduction to Statistics (3) (SGR 5)	-
<b>Electives</b>			<b>1-2</b>	<b>Electives</b>			<b>9-10</b>
<b>Summary of Credits in Food Science (B.S.)</b>							
<b>System General Education Requirements</b>			<b>32</b>	<b>System General Education Requirements</b>			<b>32</b>
<b>Major Requirements</b>			<b>51</b>	<b>Major Requirements</b>			<b>51</b>
<b>Supporting Coursework</b>			<b>35-36</b>	<b>Supporting Coursework</b>			<b>27-28</b>
<b>Electives</b>			<b>1-2</b>	<b>Electives</b>			<b>9-10</b>
Total number of hours required for major			103-104	Total number of hours required for major			92-93
Total number of hours required for degree			120	Total number of hours required for degree			120

## 8. Explanation of the Change:

The proposed curriculum changes align with the revised Food Science curricula recommended by the certifying body, the Higher Education Review Board of the Institute of Food Technologists. The modification involves removing BIOL 153-153L (General Biology II and Lab), PHYS 113-113L (Introduction to Physics II and Lab), and ABS 203 (Global Food Systems) from the list of required supporting courses or electives that satisfy SGR 3. These adjustments will give students more flexibility in selecting electives while still meeting the accrediting body's standards. Additionally, the Department of Dairy and Food Science has requested to split the first-year experience course into two one-credit courses, DS 119 Opportunities in Dairy and Food Science and DS 120 Survey of Dairy and Food Science Industries.