



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

**Substantive Program Modification Form**

<b>UNIVERSITY:</b>	SDSU
<b>CURRENT PROGRAM TITLE:</b>	Biological Sciences (M.S.) – Food Science Specialization
<b>CIP CODE:</b>	26.0101 – Biological Sciences Major 01.1101 – Food Science Specialization
<b>UNIVERSITY DEPARTMENT:</b>	Grad Study – Dairy & Food Science
<b>BANNER DEPARTMENT CODE:</b>	SGDS
<b>UNIVERSITY DIVISION:</b>	Graduate School
<b>BANNER DIVISION CODE:</b>	3G

**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

9/22/2020

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 (explain below)                   |

**2. Effective date of change:** 2021-2022 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. Primary Aspects of the Modification:**

Existing Curriculum

Proposed Curriculum (Highlight Changes)

Pref	Num	Title	Cr Hrs	Pref	Num	Title	Cr Hrs
				DS	722	Advanced Dairy and Food Microbiology	3
				DS	731	Laboratory Techniques in Dairy Science	3
XXX	790	Seminar	2	DS	790	Seminar	2
				DS	796	Field Experience	1
				FS	500/L	Food Chemistry and Analysis and Lab	5
FS	550/L	Food Analysis and Lab	4	FS	550/L	Food Analysis and Lab	4

Existing Curriculum				Proposed Curriculum (Highlight Changes)			
Pref	Num	Title	Cr Hrs	Pref	Num	Title	Cr Hrs
FS	551/L	New Food Product Development and Lab	4	FS	551/L	New Food Product Development and Lab	4
		STAT course 500-level or higher	3			STAT course 500-level or higher	3
<i>Select one of the following:</i>				<i>Select one of the following:</i>			
<i>Option A: Thesis</i>				<i>Option A: Thesis</i>			
XXX	798	Thesis	5-10	FS	798	Thesis	5-9
Electives			7-12	Electives			0-4
<i>Option B: Research/Design Paper</i>				<i>Option B: Research/Design Paper</i>			
XXX	788	Master's Research Problems/Projects	2-3	FS	788	Master's Research Problems/Projects	2-3
Electives			16-17	Electives			8-9
Total number of hours required for degree				Total number of hours required for degree			
Option A			30	Option A			30
Option B			32	Option B			32

## 7. Explanation of the Change:

These changes more clearly outline the available coursework within the department and allow the program to more closely align with the Student Learning Outcomes. This also focuses and immerses the student more fully within the department and strengthens the overall position of the department to be able to validate baseline skill levels and competencies expected of a student specializing in Food Science while maintaining a level of flexibility for the student and their committee to design an appropriate plan-of-study.

DS 796 Field Experience is a new course with sections specific to Food Science designed to expose the student to basic operational competencies they are likely to encounter in any food manufacturing setting outside of a research laboratory. This will allow the student to work to improve their soft skills and ability to interact with other industry representatives.

FS 500/L Food Chemistry and Analysis and Lab is a new course that has replaced FS 550/L Food Analysis and Lab within the Food Science curriculum.