Annual Academic Assessment Report

(PhD/FOOD SCIENCE)

(May 12, 2025)

1. Results of analysis of assessment of Student Learning Outcome (SLO)

The Student Learning Outcomes provided below are those related to Research and Scientific Enquiry Skills.

SLO 1: Demonstrate scientific enquiry skills through the research performed

1. SLO 1 was assessed in Summer 2024, Fall 2024, and Spring 2025 by each student's graduate committee during the defense for all in FDSC PhD students (n=2). Student knowledge will be assessed by the graduate committee during the presentation. A determination by the committee is made individually based on information presented by students and through questions posed to the student. Graduate committees will design a line of questioning allowing the determination the depth of knowledge of the student in their specialty area.

Acceptable and **Ideal Targets**

- Acceptable Target: No students in the novice category for any on the rubric sub-categories (1, 2, 3, and 4), 75% of students in the Advanced or above category and at least 50% of students in the Expert category.
- Ideal Target: 100% at or above the Advanced level for all rubric sub-categories.

2. Key Findings for SLO 1:

	Novice	Intermediate	Advanced	Expert
Topic Selection	0	0	1	1
Design Process	0	0	1	1
Conclusions	0	0	1	1
Limitations and Implications	0	0	0	2

3. Interpretation of key findings in connection to student learning:
   - Both the ideal and acceptable targets were met for content development, conventions, sources, and syntax and mechanics.
     - Subcategory 1: 50% of the students Expert, 50% of the students Advanced
     - Subcategory 2: 50% of the students Expert, 50% of the students Advanced
     - Subcategory 3: 50% of the students Expert, 50% of the students Advanced
     - Subcategory 4: 100% of the students Expert

- The results are consistent with previous assessment years and indicate our PhD students are meeting or exceeding the program expectations. Based on this, the data are indicative of a PhD program in FDSC that provides a solid foundation for our students.

4. Description of anticipated actions for improvement of teaching and learning based on key findings:
   - Based on the limited sample size and high ranking of these students, it is difficult to make specific recommendations to improve.

SLO 2: Demonstrate problem quantitative skills through the analysis of research data.

1. SLO 2 was assessed in Summer 2024, Fall 2024, and Spring 2025 by each student's graduate committee during the defense for all in FDSC PhD students (n=2). Student abilities will be assessed by the graduate committee during the presentation. A determination by the committee is made individually based on information presented by students and through questions posed to the students by the committee. Graduate committees use the dissertation and the slide presentation for the oral defense to make a determination of the student quantitative skills including experimental design and analysis competencies.

Acceptable and **Ideal Targets**

- Acceptable Target: No students in the novice category for the rubric category related to Quantitative skills, 75% of students in the Advanced or above category, and at least 40% of students in the Expert category.
- Ideal Target: 100% at or above the Advanced level for all rubric sub-categories.

2. Key Findings for SLO 2:

	Novice	Intermediate	Advanced	Expert
Quantitative Skills	0	0	2	0

3. Interpretation of key findings in connection to student learning:
   - Both the ideal and acceptable targets were met.
     i. Subcategory 1: 100% of the students Advanced

   - The results are consistent with previous assessment years and indicate our PhD students are meeting or exceeding the program expectations. Based on this, the data are indicative of a PhD program in FDSC that provides a solid foundation for our students.

4. Description of anticipated actions for improvement of teaching and learning based on key findings:
    - Based on the limited sample size and high ranking of those students, it is difficult to make specific recommendations to improve their communication skills in food science.

2. Any changes to degree/certificate planned or made on the basis of the assessment and analysis

No changes to the degree program have been planned nor were made based on the assessment and analysis. However, we are actively working on updating graduate course offerings for our PhD students.

3. Any changes to the assessment process made or planned.

No changes to the assessment process have been made or planned.