Annual Academic Assessment Report
(MS/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 MS students (n=4). 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 of the rubric sub-categories (1, 2, 3 and 4), 60% of students in the Advanced or above category, and at least 20% 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	3
Design Process	0	0	2	2
Conclusions	0	1	2	1
Limitations and Implications	0	1	2	1

3. Interpretation of key findings in connection to student learning:
   - The acceptable target was met as:
     - No students were in the novice category.
     - 66 - 100% of the students were at the advanced or above level for all subcategories
       - Subcategory 1: 100% of the students
       - Subcategory 2: 100% of the students
       - Subcategory 3: 75% of the students
       - Subcategory 4: 75% of the students

- At least 20% of the students were at the expert level for all four subcategories.
  - Subcategory 1: 75% of the students
  - Subcategory 2: 50% of the students
  - Subcategory 3: 25% of the students
  - Subcategory 4: 25% of the students
- The ideal target was not met with one student rated intermediate in the subcategory 3 & 4.
- There is room for improvement in the MS program in getting all students at the advanced level and above. More students are in the advanced section compared to the previous evaluation of 2022 – 2023.

4. Description of anticipated actions for improvement of teaching and learning based on key findings:

- There are areas to improve, but it is small sample size and MS program is shorter.
- Because each student is evaluated by their customized graduate committee, there also exists differences across each faculty member with respect to their interpretation of each outcome and competency level. We will continue look at the data to determine if there are any faculty who consistently score higher or lower compared the rest of the committee.
- We have updated the seminar structure to help improve the soft skills and research skill development; however, these students were not impacted by the update. We will consider this more in next year's evaluation.

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 MS students (n=4). 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 sub-category 3, 50% of students in the Advanced or above category and at least 20% of students in the Expert category.
   - Ideal Target: 100% at or above the advanced for the rubric sub-category.

2. Key Findings for SLO 2:

	Novice	Intermediate	Advanced	Expert
Quantitative Skills	0	1	2	1

3. Interpretation of key findings in connection to student learning:
   - The acceptable target and ideal target were met.
   - The ideal target was not met with one student in the intermediate subcategory.
   - The results indicate that our MS program is providing a sufficient skillset in quantitative skills. Data indicate our MS students are meeting the program expectations. This shows that the MS program in FDSC provides a solid foundation for our students.

4. Description of anticipated actions for improvement of teaching and learning based on key findings:
   - The acceptable target was met, but it is a limited sample size. 75% of our students were not considered experts in this SLO. It is challenging to achieve expert levels within the time constraints of a MS program.

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 on the basis of the assessment and analysis.
   - As indicated in our previous interpretation of SLO, we have updated the seminar structure to help improve the soft skills and research skill development; however, these students were not impacted by the update. We will consider this more in next year's evaluation.

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

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