

Annual Academic Assessment Report

(BS/FOOD SCIENCE)

(May 19, 2022)

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

The Student Learning Outcomes provided below are those related to Sensory Science.

SLO SS.1. Discuss the physiological and psychological basis for sensory evaluation.

1. SLO SS.1 was assessed in Fall 2021 in FDSC 4413/4413L Sensory Evaluation of Food. Two different Learning Assessment Techniques (LAT) were used to assess SS.1:

LAT 1 (Pro and Con Grid; 30-point scale): administered to a group of 16 students enrolled in FDSC 4413/4413L; students had 25 minutes to complete the exam during class. The pro and con grid required the students to analyze the pros/cons of an issue related to sensory evaluation.

LAT 2 (Digital Projects; 100-point scale): administered to a group of 16 students enrolled in FDSC 4413/4413L; each student created a video clip (for 15 min) that included knowledge and application related to one of five senses as a take-home exam format.

2. Key Findings for SLO SS.1:

LAT 1 (Pro and Con grid): 11/16 (68.7%) students scored 26-30 points; 3/16 (18.8%) students scored 21-25 points; and 2/16 (12.5%) scored lower than 21 points.

LAT 2 (Digital Projects): 9/16 (56.2%) students scored 90-100 points; 5/16 (31.3%) students scored 80-89 points; and 2/16 (12.5%) scored lower than 80 points.

3. Interpretation of key findings in connection to student learning:

LAT 1 (Pro and Con grid): Our first data point indicates that SLO [SS.1] was met, as more than half of the students (68.8%) scored within the highest point range of the rubric.

LAT 2 (Digital Projects): Our second data point indicates that SLO [SS.1] was met, as more than half of the students (56.2%) scored within the highest point range of the rubric.

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

Based on the inconsistency of our 2 LAT, we plan on the following:

- Provide specific guidelines about how to create a video recording in a more informative way

SLO SS.2. Apply experimental designs and statistical methods to sensory studies.

1. SLO SS.2 was assessed in Fall 2021 in FDSC 4413/4413L Sensory Evaluation of Food. Two different Learning Assessment Techniques (LAT) were used to assess SS.2:

LAT 1 (Quick Write; 20-point scale): administered to a group of 16 students enrolled in FDSC 4413/4413L; students had 25 minutes to complete the exam during class. The Quick Write asks students to write a response in a brief amount of time to an open-ended prompt posed by the instructor.

LAT 2 (Case Study; 20-point scale): administered to a group of 16 students enrolled in FDSC 4413/4413L; students had 25 minutes to complete the exam during class

2. Key Findings for SLO SS.2:

LAT 1 (Quick Write): 10/16 (62.4%) students scored 16-20 points; 3/16 (18.8%) students scored 11-15 points; and 3/16 (18.8%) scored lower than 11 points.

LAT 2 (Case Study): 9/16 (56.2%) students scored 16-20 points; 3/16 (18.8%) students scored 11-15 points; and 4/16 (25.0%) scored lower than 11 points.

3. Interpretation of key findings in connection to student learning:

LAT 1 (Quick Write): Our first data point indicates that SLO [SS.2] was met, as more than half of the students (62.6%) scored within the highest point range of the rubric.

LAT 2 (Case Study): Our second data point indicates that SLO [SS.2] was met, as more than half of the students (56.2%) scored within the highest point range of the rubric.

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

As 25% of the students scored lower than 11 points (out of 20 points) at LAT 2, we will provide more practice sessions to monitor students' understanding.

SLO SS.3. Select sensory methodologies to solve specific problems in food.

1. SLO SS.3 was assessed in Fall 2021 in FDSC 4413/4413L Sensory Evaluation of Food. Two different Learning Assessment Techniques (LAT) were used to assess SS.3:

LAT 1 (Pro and Con Grid; 25-point scale): administered to a group of 16 students enrolled in FDSC 4413/4413L; students had 25 minutes to complete the exam during class. The pro and con grid required the students to analyze the pros/cons of select sensory methodologies.

LAT 2 (Case Study; 30-point scale): administered to a group of 16 students enrolled in FDSC 4413/4413L; students had 25 minutes to complete the exam during class. The case study involved giving students a real-life scenario, or “case” related to sensory evaluation. The students were then asked to develop a plan to solve the specific problem using appropriate sensory methodologies.

2. Key Findings for SLO SS.3:

LAT 1 (Pro and Con grid): 9/16 (56.2%) students scored 22-25 points; 4/16 (25.0%) students scored 18-21 points; and 3/16 (18.8%) scored lower than 18 points.

LAT 2 (Case Study): 8/16 (50.0%) students scored 26-30 points; 6/16 (37.5%) students scored 21-25 points; and 2/16 (12.5%) scored lower than 21 points.

3. Interpretation of key findings in connection to student learning:

LAT 1 (Pro and Con grid): Our first data point indicates that SLO [SS.3] was met, as more than half of the students (56.2%) scored within the highest point range of the rubric.

LAT 2 (Case Study): Our second data point indicates that SLO [SS.3] was met, as a half of the students (50.0%) scored within the highest point range of the rubric.

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

Based on the inconsistency of our 2 data points, we plan on the following:

- Provide more practice examples to exercise how to solve specific sensory problems related to food industry, increasing a better understanding of SS.3 through the Case Study format.

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

No changes to the degree program are planned nor were made on the basis of the assessment and analysis.

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

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