Annual Assessment Report for 2020-2021 AY

Reports completed on assessment activities carried out during the 2020-21 AY will be due September 30th 2021 and must be e-mailed to the Director of Assessment, Dr. Douglas Fraleigh (douglasf@csufresno.edu).

Provide detailed responses for each of the following questions within this word document. Please do NOT insert an index or add formatting. Furthermore, only report on two or three student learning outcomes even if your external accreditor requires you to evaluate four or more outcomes each year. Also be sure to explain or omit specialized or discipline-specific terms.

Department/Program: Food Science & Nutrition/Culinology Degree B.S.

Assessment Coordinator: Shabnam Pooya, PhD

1. Please list the learning outcomes you assessed this year.

SLO 1C.1: Students will demonstrate application of culinary science to food production and product development

SLO 1C.2: Students will apply critical thinking skills and demonstrate effective data collection and analysis related to Culinology.

2. What assignment or survey did you use to assess the outcomes and what method (criteria or rubric) did you use to evaluate the assignment? Please describe the assignment and the criteria or rubric used to evaluate the assignment in detail and, if possible, include copies of the assignment and criteria/rubric at the end of this report.

Due to COVID-19 shelter in place order and transition to the online course formatting, the Food Science and Nutrition department did not report the 2019-2020 department annual assessment statement. Therefore, this year we will assess Culinology career specialty, "The Culinary Medicine Project in course *CULG 152: Techniques for Healthy Cooking*.

This is a course that is required for both Culinology and Dietetics/Food Administration career tracks. Student classification range from sophomore to senior, as they just need to complete one prerequisite course (CULG 50) before enrolling in CULG 152.

The "Culinary Medicine Project" was used to assess both SLO 1C.1 and 1C.2. This is a semester-long group research project, where individual students contribute to multiple components of the project including:

A) A literature review of a specific disease condition that includes foods and culinary practices that have therapeutic or ameliorating effects on the assigned disease (SLO 1C.2). The literature review was completed through the discussion board platform on Canvas. The criteria for evaluation were that: 1) each student in the group contributed six (6) summaries

of correctly-referenced, peer-reviewed articles to the literature review and 2) each student provided additional discussion to their teammate's post that highlighted how their material contributed to better understating of culinary practices that can have therapeutic or ameliorating effects on the assigned disease.

The below rubric was used for the assessment. The benchmark is for both tasks: Six summaries were provided and additional discussion was contributed to other teammates' summary submissions. We expected 80% or more of the students would achieve a 3 (proficient) or higher score on the rubric.

	Above Benchmark	Proficient (3)	Partially Proficient	Unsatisfactory
	(4)		(2)	(1)
Student Provided 6 summaries of correctly-referenced, peer-reviewed articles to the group literature review	6 pertinent summaries accompanied by discussion that has depth and insightful analysis	6 pertinent summaries but discussion's depth and insightful analysis is limited	Some summaries are presented but not elaborated	Limited and/or unrelated discussion
Student provided additional discussion to teammate's post that highlighted how their material contributed to better understating of culinary practices that can have therapeutic or ameliorating effects on the assigned disease.	Discussion contributed to each teammate's initial post that has depth and insightful analysis	Discussion contributed to each teammate's initial post, but depth and insightful analysis is limited	Some discussion is presented but not elaborated	Limited and/or unrelated discussion

B) Development and execution of a lesson plan that includes a student-led demonstration of food production using the evidence-based culinary science that was established in the literature review and (SLO 1C.1). The criteria for evaluation were that each student applied the knowledge collected from the literature review to develop a 1.5 hour cooking lesson plan for a hypothetical client with the assigned disease condition.

The below rubric was used for the assessment. The benchmark is assessing the student's ability to apply culinary science to food production and product development in the lesson plan. We expected 80% or more of the students would achieve a 3 (proficient) or higher score on the rubric.

	Above Benchmark (4)	Proficient (3)	Partially	Unsatisfactory (1)
			Proficient	
			(2)	
Student applied	Culinary science technique	Culinary science technique	Culinary	Limited and/or unrelated
assigned culinary	was included in the lesson	was included, but	science	discussion/demonstration
science technique	plan, and accompanied by	discussion/demonstration's	technique is	
in the	discussion and	depth and application are	presented	
development and	demonstration that has	limited	but not	
execution of the	depth and insightful		elaborated	
culinary medicine	application of the			
lesson plan	technique			

3. What did you learn from your analysis of the data? Please include sample size (how many students were evaluated) and indicate how many students (number or percentage instead of a median or mean) were designated as proficient.

For SLO 1C.1: (Students will demonstrate application of culinary science to food production and product development)

Out of the 45 students that were evaluated, 38 or 84.4% of the students were designated as proficient in demonstrating application of culinary science to food production and product development, as evidenced in their submitted lesson plan.

For SLO 1C.2: (Students will apply critical thinking skills and demonstrate effective data collection and analysis related to Culinology.)

Out of the 45 students that were evaluated, 37 or 82.2% of the students were designated as proficient in applying critical thinking skills and demonstrating effective data collection and analysis related to Culinology.

Over the course of the semester, some students expressed their opposition to the amount of work that was required to complete this semester-long project. However, each component of the project included time for the students to receive critiques on their initial draft submissions, and then resubmit a revision for the grade consideration. Students indicated that this process allowed them to fully understand the expectations of the instructor, and adequately demonstrate their grasp of the topics at hand.

4. What changes, if any, do you recommend based on the assessment data?

Since the majority of assignments and points in the course relate to knowledge of key topics, the fact that no student failed the course also confirms that the majority of students are proficient in relevant knowledge and thus no changes to the course or curriculum will be made at this time.

The benchmark for the semester-long project was set at 80% instead of 100% to earn a C or better because students take this course at different times in their degree progress.

Furthermore, the project is worth 400 points out of 2000, or 20% of the total possible points for this class. There are several additional assignments that also test student knowledge and application. Therefore, the benchmark was 80% for both learning outcomes that were assessed this year. Since 84% of students passed the literature review, and 82% passed the lesson plan development and presentation with a grade of C or better no changes will be made to this project. Since the project is only a partial measure of student knowledge gained from the course, student grades in the course are also relevant to the outcome. No students received a failing grade for the course in the semester assessed.

5. If you recommended any changes in your response to Question 4 in last year's assessment report, what progress have you made in implementing these changes? If you did not recommend making any changes in last year's report please write N/A as your answer to this question.

N/A

6. What assessment activities will you be conducting during the next academic year?

Food science major, FSC 178. Food Laws, Regulations, Inspection, and Grading Method A3: Direct measurement by the course's Final Exam or Final Report to evaluate student's knowledge of food laws and regulations. We will assess outcomes:1FS.1 and 1FS.2

7. Identify and discuss any major issues identified during your last Program Review and in what ways these issues have or have not been addressed.

N/A