

Comprehensive Program Review Report



Program Review - Nutrition/Foods

Program Summary

2023-2024

Prepared by: Milli Owens

What are the strengths of your area?: .

1. The Associate of Science in Nutrition (AS-T) degree became available for students in the spring 2020 semester. In the 2022-23 school year 54 students selected the AS-T in nutrition as their major. This is about the same as the 56 students who selected the AS-T in 2021-22 and up from 37 in 2020-21. We had three students complete the degree in 2022-23 which is an increase from one student in 2021-22 and one student in 2020-21. Although currently a low number of students are completing the degree, the numbers have increased. Hopefully many of the students who selected this area as a major will complete their course work and begin to increase the number of students receiving the degree.

2. Support for CTE students. Nutrition courses (NUTR 18, 20 and 107) are incorporated in the culinary certificates and degrees. NUTR 18 and NUTR 20 are also part of the local COS General Education areas. NUTR 20 is in Area D: Social/Behavioral Science and NUTR 18 is in Area B: Natural Science.

3. Strong faculty, both full-time and adjunct, in nutrition and culinary departments. Two nutrition/culinary adjunct faculty retired in summer 2023. The retired adjunct who was teaching NUTR 18 has been replaced with a euthanasic new adjunct faculty member who is already becoming part of the NUTR 18 team. The process to replace the retired adjunct who taught in the culinary area has already begun and we anticipate having a terrific person in place for spring 2024.

There is strong collaboration between nutrition and culinary faculty. This collaboration includes conference attendance, advisory board involvement, interactions that support outcomes, curriculum development and funding. A team approach provides a much better learning experience for students.

4. The NUTR 20: Cultural Foods course, a hands-on learning experience in geography, culture and food, is on the IGETC and CSU transfer patterns. It appears likely that this class will be on the CalGETC pattern. It offers students a unique opportunity to develop cooking skills, and learn the cultural significance of food while fulfilling educational requirements.

What improvements are needed?: .

1. Support for culinary laboratory. To support student learning in the culinary classes, the laboratory, equipment, supplies and foods need to meet industry standards. A full time technician would allow these standards to be met consistently. The culinary professor should have responsibilities more similar to most faculty which would allow the professor to have more time to expand and maintain student learning experiences in culinary courses.

2. Continue to revise and update NUTR 18 to improve student success rates. Overall success in NUTR 18 is 73.4%, compared to the college wide course success rate of 71.8%. Although it is nice that the student success rate in NUTR 18 is higher than the college success rate, neither have returned to pre-COVID success rates. In 2018-19 the NUTR 18 success rate was 78.0%. In general females are more successful than males, 75.4% for females compared to 70.1% for males. When looking at Gender and Race/Ethnicity, Asian females are most successful (80.0%), then White females (78.6%), then Hispanic females (74.0%), then Hispanic males (70.9%) and least successful are white males (68.0%).

Pell grant recipients taking NUTR 18 are more successful (73.4%) than NUTR 18 student who do not get Pell grant (69.8%). Continuing students are more successful (74.4%) than first-time students (69.7%) taking NUTR 18.

As we consider strategies to improve success in NUTR 18 we need to be aware of the first-time in college, white male student who is not receiving the Pell grant.

3. Adequate computer connectivity is needed. The TULE building has ongoing problems with technology. Some of the classrooms do not have the capacity to support all students being on Wi-Fi at the same time for projects or other in class activities. For example TULE 500 needs the ability to support 23 students working on their diet analysis online at the same time. Several offices (504A, 504B, 504C) have frequent network outages, which makes it impossible to provide student support during office hours or complete work in a timely or effective manner. TULE 509 is being utilized for the Fall 2023 semester for a live synchronous hyflex course offering, and there have been frequent issues with the hyflex monitor. IT technicians have been extremely responsive and helpful but per their reports and responses, they are limited in what they are able to do to provide permanent fixes, as the infrastructure (cabling, wiring, etc.) of the TULE building is outdated and needs to be completely replaced.

Describe any external opportunities or challenges.:

Overall SLO Achievement: SLO achievement is adequate at this time.

Changes Based on SLO Achievement: None

Overall PLO Achievement: This assessment is behind and needs to be completed in May 2024. There is a brief discussion about this in the "(Completed) Develop assessment methods for Nutrition As-T Program Level Outcomes" action.

Changes Based on PLO Achievement: None

Outcome cycle evaluation: The SLOs are all on track. The PLO is behind and needs to be completed in May 2024.

Action: Anticipate enrollment shifts in nutrition courses.

Determine the type of student currently enrolled in nutrition courses, considering student's major, age, education goal and similar factors. Consider if these factors have or in the future will impact enrollment in nutrition courses. Also consider if there are other things that may impact enrollment.

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Implementation Timeline: 2023 - 2024

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Identify related course/program outcomes:

Person(s) Responsible (Name and Position): Milli Owens

Rationale (With supporting data): The development and expansion of the culinary certificates and degree and the AS-T in nutrition may have changed the type of student who is enrolling in our classes. Also the upcoming changes to General Education patterns, such as CalGETC, may change enrollment.

Priority: High

Safety Issue: No

External Mandate: No

Safety/Mandate Explanation:

Link Actions to District Objectives

District Objectives: 2021-2025

District Objective 1.1 - The District will increase FTES 2% from 2021 to 2025.

District Objective 2.1 - Increase the number of students who earn an associate degree or certificate (CTE and non-CTE) by 5% from 2021-2025.

District Objective 2.2 - Increase the number of students who are transfer-ready by 15% and students who transfer to four-year institutions by 10% from 2021-2025.

District Objective 2.4 - Increase the percentage of CTE students who achieve their employment objectives by five percentage points (job closely related to field of study and attainment of a livable wage) and the number of CTE students who successfully complete 9+ CTE units in a single year by 10% from 2021-2025.

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District Objective 3.1 - Reduce equity gaps in course success rates across all departments by 40% from 2021-2025.

Action: Monitor and Improve NUTR 18 success and withdraw rates

Explore opportunities to improve NUTR 18 success rates. Students seem to have difficulty with two areas, not related directly to nutrition, basic arithmetic (especially fractions related to measurement - 1/2 cup, 1/4 cup etc.) and computer applications (especially diet analysis and comfort with applications). In addition we are working to improve over-all experience in class - more hands-on, interactive or demonstration type activities, as well working to improve lecture content.

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Implementation Timeline: 2021 - 2022, 2022 - 2023, 2023 - 2024

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Identify related course/program outcomes: District Objective 2.4: Increase Career Technical Education course success rates and program completion annually. All NUTR 18 outcomes would be affected especially the diet analysis outcome.

Person(s) Responsible (Name and Position): Milli Owens

Rationale (With supporting data): NUTR 18 is a transfer-level nutrition course. The class has a significant amount of required science-based material to cover during the semester. Elimination of material is not allowed if the course is to continue meeting the state C-ID description, so there needs to be a way to help students make connections and understand processes and assignments quickly. When the student can not make the connections and understanding quickly there should be smooth processes in place to direct them to optimal support. This should not just be support that looks good on a plan but real support that helps the student learn and continue in the course.

Arithmetic:

Students have difficulty with basic arithmetic which directly affects their ability to do assignments involving a food label, measurement of foods, nutrition needs, body weight and similar topics. Explore options to help with this area including online tutorial or simulation opportunities to strengthen students skills in basic arithmetic.

Diet Analysis & Computer Skills:

Students have difficulty understanding the diet analysis process, which is all online. Explore options to help with this area. If a teacher can have students do, or at least start, a computer application in class it is more likely to be successful, than describing the application and process and having students complete it outside of class.

Potential ideas include having students use computers during traditional class time, math tutorial, computer simulations, support courses and instructor training in new techniques and teaching approaches.

Priority: High

Safety Issue: No

External Mandate: No

Safety/Mandate Explanation:

Update on Action

Updates

Update Year: 2023 - 2024

09/08/2023

Status: Continue Action Next Year

Success rates have improved overall in NUTR 18. They were 60.8% in the 2021-22 school year and 73.4% in the 2022-23 school year. The in-class computers seem to be helping especially for diet analysis. Having more hands-on activities like the Glo-germ kits for handwashing also seem to be helping. We've added a model of one pound of fat for the fall 2023 semester to continue improving the hands-on activities.

For fall 2023 in the five hybrid NUTR 18 sections a faculty member more skilled in teaching math assisted students during the class activity involving food label math. We will see if this improves this skill for those students.

Our least successful students are white males who are in college for the first time and are not receiving the Pell grant. We need to be aware of approaches that might focus on them.

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Impact on District Objectives/Unit Outcomes (Not Required):

Update Year: 2022 - 2023

08/27/2022

Status: Continue Action Next Year

In the 2021-22 school year we (full time and all adjunct nutrition faculty) worked together to review new textbooks and their on-line support programs. We selected Nutrition & You with MasteringNutrition from Pearson publishing and began using it in all NUTR 18 sections in Fall 22. MasteringNutrition seemed to work smoothly across several devices including cellphones and had multiple instruction videos about using online applications. It also seemed to have many interactive types of assignments and activities. MasteringNutrition also included MyDietAnalysis which we hope will improve the diet analysis project.

In fall 22 we also:

- Began using Glo-germ kits for handwashing interactive activity and hope to add more things like this to improve the class experience for students.

- Began using laptop computers in class to start the diet analysis and other class activities. These laptops are in a cart in the classroom and are shared with the Fashion department.

.Since we began these changes in Fall 22, the success rates from the 2022-23 academic year should give some indication of the effectiveness of these changes.

MasteringNutrition includes a couple videos on math in nutrition but we still need to find ways to improve student knowledge and skill in this area.

Impact on District Objectives/Unit Outcomes (Not Required):

Link Actions to District Objectives

District Objectives: 2018-2021

District Objective 2.1 - Increase the percentage of students who earn an associate degree or certificate (CTE and Non-CTE) by 5 percentage points over three years

District Objective 2.4 - By 2021, Increase the percentage of CTE students who achieve their employment objectives by 5 percentage points

District Objectives: 2021-2025

District Objective 1.1 - The District will increase FTES 2% from 2021 to 2025.

District Objective 2.1 - Increase the number of students who earn an associate degree or certificate (CTE and non-CTE) by 5% from 2021-2025.

District Objective 2.2 - Increase the number of students who are transfer-ready by 15% and students who transfer to four-year institutions by 10% from 2021-2025.

District Objective 2.4 - Increase the percentage of CTE students who achieve their employment objectives by five percentage points (job closely related to field of study and attainment of a livable wage) and the number of CTE students who successfully complete 9+ CTE units in a single year by 10% from 2021-2025.

District Objective 3.1 - Reduce equity gaps in course success rates across all departments by 40% from 2021-2025.

District Objective 3.2 - Increase the course success rate by 10% for each disproportionately impacted student group in their transfer level Quantitative Reasoning and English courses by the end of their first year from 2021-2025.

Action: (Completed) Assess support for nutrition laboratory and courses

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Examine and assess need for assistance to manage increased lab course offerings and increased class activities, supplies and equipment.

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Implementation Timeline: 2021 - 2022, 2022 - 2023

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Identify related course/program outcomes: This relates to all student learning in nutrition courses.

Person(s) Responsible (Name and Position): Milli Owens and Kyran Wiley

Rationale (With supporting data): Within nutrition there are several areas that need support to be completed. Some of those areas are:

- Foods Lab: NUTR 20: Cultural Foods has become a much more popular course. We have increased the number of sections and those are filling well. This course has a very significant laboratory component which requires shopping, preparation, equipment management and clean up. One section of NUTR 20 has been offered the last two summers and filled. We would like to expand this to two sections.

- Food Models: NUTR 18 has increased the number and use of food models to development more hands-on assignments and class activities to increase success. Food models need to be cleaned, classified and assessed regularly.

-Laptop computers: The fashion department has ordered and should soon receive a cart of laptop computers. These will be stored in TULE 500, where NUTR 18 is commonly taught. Faculty in fashion, nutrition and culinary departments plan to coordinate so all three departments can use the laptops in class. In NUTR 18 it is hoped that using the laptops in class can specifically address problems students have with their diet analysis which is completed online. NUTR 107 is considering simulations or similar activities to increase student learning. The laptops and cart will need to be cleaned and organized regularly.

Priority: High

Safety Issue: No

External Mandate: No

Safety/Mandate Explanation:

Update on Action	
<p><i>Updates</i></p> <p>Update Year: 2022 - 2023</p> <p>Status: Action Completed</p> <p>This action is complete because it is clear we need more support so the culinary professor has responsibilities more similar to most faculty.</p> <p>Impact on District Objectives/Unit Outcomes (Not Required):</p>	09/08/2023
<p>Update Year: 2022 - 2023</p> <p>Status: Continue Action Next Year</p> <p>Although having the technician part time is extremely helpful, we need more help to maintain the lab in a manner that allows each student to have the same learning experience. The lab needs to be stocked and cleaned between every class. Also the culinary instructor need assistance preping materials for each class session.</p> <p>Impact on District Objectives/Unit Outcomes (Not Required):</p>	09/13/2022

Link Actions to District Objectives

District Objectives: 2018-2021	
District Objective 2.1 - Increase the percentage of students who earn an associate degree or certificate (CTE and Non-CTE) by 5 percentage points over three years	
District Objective 2.4 - By 2021, Increase the percentage of CTE students who achieve their employment objectives by 5 percentage points	
District Objectives: 2021-2025	
District Objective 1.1 - The District will increase FTES 2% from 2021 to 2025.	

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District Objective 2.1 - Increase the number of students who earn an associate degree or certificate (CTE and non-CTE) by 5% from 2021-2025.

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District Objective 3.1 - Reduce equity gaps in course success rates across all departments by 40% from 2021-2025.

Action: (Completed) Develop assessment methods for Nutrition AS-T Program Level Outcomes

The AS-T in nutrition became available in spring 2020. Outcomes were developed for the program, but assessment methods were not designed. Those assessment methods need to be designed and then, if possible, used to assess the outcomes.

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Implementation Timeline: 2022 - 2023

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Identify related course/program outcomes:

Person(s) Responsible (Name and Position): Milli Owens

Rationale (With supporting data):

Priority: High

Safety Issue: No

External Mandate: Yes

Safety/Mandate Explanation: We are required to assess PLOs, thus we need an assessment method to do so.

Update on Action

Updates

Update Year: 2022 - 2023

09/05/2023

Status: Action Completed

An assessment method was designed, email all students who received the degree (AS-T in nutrition) in May. In theory this email should have been sent to the three students who received an AS-T in nutrition last May, but it was not sent. The faculty member who should have done this learned how to do it, wrote the draft email, got the emails for the three students and then did not follow through and actually send the email. This faculty member (who is also writing this Program Review) plans to not allow this process to get lost in the end-of-semester hussle.

Since this action only included development of the assessment methods and not actually assessing the PLO is is considered complete.

Impact on District Objectives/Unit Outcomes (Not Required):

Link Actions to District Objectives

District Objectives: 2021-2025

District Objective 2.4 - Increase the percentage of CTE students who achieve their employment objectives by five percentage points (job closely related to field of study and attainment of a livable wage) and the number of CTE students who successfully complete 9+ CTE units in a single year by 10% from 2021-2025.

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District Objective 3.2 - Increase the course success rate by 10% for each disproportionately impacted student group in their transfer level Quantitative Reasoning and English courses by the end of their first year from 2021-2025.

District Objective 4.1 - Increase the effective use of data and transparency in decision making at all institutional levels from 2021-2025.

District Objective 4.2 - Improve communication practices needed to support organizational effectiveness and continuous improvement across all District units and constituents from 2021-2025.