

Comprehensive Program Review Report



Program Review - Nutrition/Foods

Program Summary

2022-2023

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 2021-22 school year 56 students selected the AS-T in nutrition as their major, up from 37 in 2020-21. We had one student complete the degree in 2020-21 and another complete the degree in 2021-22. Although this seems like a very low number of students completing the degree, considering this degree has just recently become available, and we are still in COVID adjustment times, these numbers are encouraging.

2. Strong faculty, both full-time and adjunct, in nutrition and culinary departments.

A. 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.

B. The willingness of all NUTR 18 faculty, 9 adjunct and 1 full-time, to work together to review the NUTR 18 textbook and select a new textbook and publisher support program for the course. This involved many Zoom meetings, extensive emails and many hours of reviewing texts and online support programs. The result is a text that covers the subject well, includes diversity, has online support that has many parts, especially the diet analysis, that work well on student cellphones.

3. Support from our division technician, a classified employee. Our technician allows the culinary lab classroom to be clean and ready-to-use from the first day of the semester, through the last final exam. Food and supplies to support classes in the Foods Lab are purchased a few times/week to make sure students get fresh and quality product to use. The technician helps maintain the food models used in NUTR 18. The technician also designs and maintains spread sheets that allow expenses to be tracked for each class which allows the division to better follow our budgets.

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 offers students a unique opportunity to develop cooking skills, and learn the cultural significance of food while fulfilling educational requirements.

5. Two nutrition courses (NUTR 20 and 107) are part of the culinary certificates which allow students to develop vocational skills.

What improvements are needed?: 1. We need to continue to consider success rates in NUTR 18 for students identifying as male. The success rate in NUTR 18 for males in 2021-22 was 58.8% compared to the college-wide success rate of 70.2% for males in 2021. Our female success rate in NUTR 18 for the same time was 61.3% compared to the college-wide success rate of 68.9%. Overall college-wide success was decreased for both genders in the 2021-22 academic year compared to the previous two years. If we look at NUTR 18 success rates of students identifying as male by self-described ethnicity, white males have a lower success rate (50%) compared to Hispanic males (58%). This is opposite of last academic year when white males (76%) had a higher success rate compared to Hispanic males (64%).

2. In this changing somewhat unstable environment we need to continue to at least maintain success rates in courses. We also need to continue to work on matching class schedules to student needs, classroom availability and faculty availability.

Describe any external opportunities or challenges.: Transitioning to post-COVID teaching and adapting to students who have been affected by their COVID experiences.

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

Changes Based on SLO Achievement: None

Overall PLO Achievement: The AS-T in Nutrition became available in spring 2020. Currently there outcomes listed for the degree/program, but they have not been assessed. This is listed as an action item in this Program Review.

Changes Based on PLO Achievement: None

Outcome cycle evaluation: Cycle is good.

Action: 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.

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.

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.

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.

Leave Blank:

Implementation Timeline: 2021 - 2022, 2022 - 2023

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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

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science-based material to cover during the semester. Elimination of material is not allowed if the course is to continuing 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: 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

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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: Assess support for nutrition laboratory and courses

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

Leave Blank:

Implementation Timeline: 2021 - 2022, 2022 - 2023

Leave Blank:

Leave Blank:

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

Updates

Update Year: 2022 - 2023

09/13/2022

Status: Continue Action Next Year

Although having the technician part time is extremely helpful, we need more help to maintain the lab in a manner that allows

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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.

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.

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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.

Action: (Discontinued) Monitor success and withdraw rates in NUTR 18

Pre-requisites were removed from NUTR 18 beginning in the fall 2019 semester as a result of AB705. We will monitor student success and withdraw rates to see if the lack of pre-requisites affects these.

Leave Blank:

Implementation Timeline: 2019 - 2020, 2021 - 2022

Leave Blank:

Leave Blank:

Identify related course/program outcomes: All three outcomes are affected by student success.

1. Sources of carbohydrate and fiber
2. Identify lipid sources
3. Diet Analysis – Record Intake

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

Rationale (With supporting data):

Priority: High

Safety Issue: No

External Mandate: No

Safety/Mandate Explanation:

Update on Action

Updates

Update Year: 2022 - 2023

09/11/2022

Status: Action Discontinued

This action will be wrapped into the "Improve NUTR 18 success rates" action from 2021-22. The action will be rewritten to

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"Monitor and Improve NUTR 18 success and withdraw rates"

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

Update Year: 2021-2022

08/18/2022

Status: Continue Action Next Year

This action continues to be difficult to assess due to COVID adapted teaching formats. This fall (2022) we are back to a "normal" variety of teaching formats (primarily face-to-face with some hybrid sections). Success rates and withdraw rates are generally not as good during this time of COVID adaption. We are trying to address this, at least partial, with the actions described in our "Improve NUTR 18 success rates" action.

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

Related Documents:

[Comparison of Success and Withdrawal Rates Fall 22.docx](#)

Update Year: 2021-2022

10/04/2021

Status: Continue Action Next Year

This action is difficult to monitor with COVID adapted teaching formats. As stated in last year's update we need at least one full year of "regular" format classes to assess this. At this point it appears that the 2022-23 academic year will provide a full year of normal format. Although we need to obtain data we suspect the lack of pre-requisites is part of the decreased success rates we are seeing. We are starting to try to address this, at least partial, with the actions described in our "Improve NUTR 18 success rates" action.

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

Link Actions to District Objectives

District Objectives: 2018-2021

District Objective 1.1 - The District will increase FTES by 1.75% over the three years

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 2.2 - Increase the number of students who transfer to a four-year institution by 10 percent over three years

District Objective 4.3 - College of the Sequoias Board of Trustees, administration, faculty, and staff will engage in best practices and staff development to sustain effective operational systems for institutional assessment and continuous improvement.

Action: (Completed) Maintain and improve laboratory environment, supply acquisition and fiscal control to support student learning opportunities.

Provide on-going and stable support for the CFS Division technician. This position is essential for the nutrition department and the CFS division to operate.

Leave Blank: Essential for Operation

Implementation Timeline: 2019 - 2020, 2021 - 2022

Leave Blank:

Leave Blank:

Identify related course/program outcomes: Because the technician works in all laboratories, culinary, fashion and child development, outcomes in all these areas are directly affected. In nutrition:

NUTR 18:

Sources of carbohydrate and fiber

Identify Lipid sources

Diet Analysis - Record Intake

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NUTR 20:

Country Presentation

Recipe adjustment

Recipe Assessment

NUTR 107:

Essential food safety & sanitation understanding

Hygiene Practices

Time & temperature standards

Because the technician develops and maintains fiscal spreadsheets showing each course, department and total division expenses courses in the CFS division which are not directly related to laboratory content are also related.

Person(s) Responsible (Name and Position): Vanessa Bailey, Division Chair, Jesse Wilcoxson, Area Dean

Rationale (With supporting data): This position is essential for our nutrition department classes. The technician orders and maintains supplies and equipment for the culinary labs as well as shops about twice/week for NUTR 20 and culinary classes. In the culinary lab the technician maintains, orders and cleans equipment, maintains and rotates food supplies, conducts end of semester cleaning as well as develops spreadsheets to track culinary expenses by class section. The culinary spreadsheets are sent to culinary faculty weekly. The technician also cleans and organizes the food models, stored in TULE 500, each semester in addition to maintaining lecture demonstration supplies for nutrition classes taught in TULE 500 for example, beads used for protein demonstrates and food containers and labels.

Priority: High

Safety Issue: No

External Mandate: No

Safety/Mandate Explanation:

Update on Action

Updates

Update Year: 2021-2022

10/04/2021

Status: Action Completed

The CFS division technician position has been permanently funded through the General Fund effective January 2022. This action item has been met.

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

Link Actions to District Objectives

District Objectives: 2018-2021

District Objective 1.1 - The District will increase FTES by 1.75% over the three years

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 Objective 4.3 - College of the Sequoias Board of Trustees, administration, faculty, and staff will engage in best practices and staff development to sustain effective operational systems for institutional assessment and continuous improvement.