



FULLERTON COLLEGE

ELEVATING.
EXCELLENCE.

Instructional Programs

2014-2015 Self-Study

Three-Year Program Review

Foods and Nutrition

Natural Sciences Division

Statement of Collaboration

The program faculty listed below collaborated in an open and forthright dialogue to prepare this Self Study. Statements included herein accurately reflect the conclusions and opinions by consensus of the program faculty involved in the self-study.

Participants in the self-study:

Colleen Kvaska, Department Coordinator, Foods and Nutrition

Kristy Richardson, Foods and Nutrition

Karen Robinson, Foods and Nutrition

Authorization

After the document is complete, it must be signed by the Principal Author, the Department Coordinator, and the Dean prior to submission to the Program Review Committee.

_____	_____	_____	_____
Printed name of Principal Author	Signature	Title	Date
_____	_____	_____	_____
Printed name of Department Coordinator	Signature	Title	Date
_____	_____	_____	_____
Printed name of Dean	Signature	Title	Date

1.0 Mission and Goals

The College's Mission, Vision, Core Values, and Goals drive all college activities. The Program Review committee would like to understand the connection of your program to the College's Mission, Vision, Core Values, and Goals. Summarize how your program supports each area.

Mission: We prepare students to be successful learners.

The Foods and Nutrition department has been actively involved in supplemental instruction for the past three years. Students are provided with the opportunity to attend regularly scheduled out of class peer facilitated sessions to review, clarify, and further their understanding of course concepts.

Vision: Fullerton College will create a community that promotes inquiry and intellectual curiosity, personal growth and a life-long appreciation for the power of learning.

Examples of the Food and Nutrition departments' commitment to the core values listed below demonstrate the alliance with the college vision.

Core Values:

We respect and value the diversity of our entire community.

The Cultural Aspects of Foods course, Foods 130, was recently added as a required course for the Foods and Nutrition Associates degree. This course meets the degree requirement for the multicultural education course.

One of the strategic goals of the department is to renovate/remodel our food laboratory classroom to better accommodate disabled students. We would like to purchase appliances and lower the counter height in food preparation areas,

We value tradition and innovation.

Department faculty is in the process of obtaining the Teaching and Learning Certificate provided through Basic Skills/Staff Development which highlights innovative, creative and cutting edge teaching techniques.

We support the involvement of all in the decision making process.

All Foods and Nutrition faculty are involved in the decision making process and work together as a team to create department policies and procedures.

We expect everyone to continue growing and learning.

As Registered Dietitians, all faculty complete 75 hours of continuing education every five years to maintain their professional credential and to remain current in the field.

Students are required to utilize current technology in the form of computer nutritional software to evaluate, assess, and improve their diets.

Faculty attend, present, and take leadership roles in campus staff development programs such as coordinating the adjunct academy this past summer and speaking as an academy guest presenter.

We believe in the power of the individual and the strength of the group

The Foods and Nutrition department helps students to develop as strong individuals as well as members of a community. This is done by promoting student involvement in the local professional association for nutrition and dietetic professionals and participating in campus events to promote sound nutritional information such as Kindercarmenita, the annual student health fair, and Worldfest.

Last year, a Nutrition Club was formed and finalized through Student Affairs this semester. Instructors serve as co-advisors as students take on leadership roles as club officers.

We expect everyone to display behavior in accordance with personal integrity and high ethical standards.

We provide numerous opportunities for students to practice ethical behavior with each other, faculty and the campus community in varied classroom assignments, projects, field trips, and special events.

As Registered Dietitians, all faculty adhere to the code of ethics established by the Credentialing Agency for Dietetic Professionals and the Academy of Nutrition and Dietetics.

We accept our responsibility for the betterment of the world around us.

The Foods and Nutrition department believes that we can make a difference in the nutritional health of the students we work with, their family members, and the community. This is accomplished by preparing students to become successful nutrition professionals and to improve their own health. Healthy students results in healthy families which then leads to healthy communities.

We value and promote the well-being of our campus community.

For the past three years, Foods and Nutrition has participated in the annual Kindercaermenita event, educating over 400 children on the importance of good nutrition.

This past spring at the Student Health Fair, Foods and Nutrition students and faculty organized a “Nutrition Station” to distribute reputable, reliable nutrition information pertinent to our campus community.

Food and Nutrition faculty regularly promotes campus events that relate to nutrition such as the Student Food Bank fundraising spaghetti luncheon and food collection events for students and student Veterans.

Goals:

Fullerton College will promote student success.

For the past three years, Foods and Nutrition has been involved in the supplemental instruction program. Data collected and analyzed by the instructors indicate that students who regularly attended SI earn an entire grade higher compared to those students not attending. This fall semester, four SI sessions were offered each week and were open to all sections of students enrolled in Human Nutrition. Our goal is to continue to expand our participation in the Supplemental Instruction program.

A transfer model curriculum was recently developed to assist in the transfer of nutrition and dietetics majors. There is also a program of study action team that has been formed to provide statewide processes for student to advance smoothly from grade 9 to 16, using Transfer Model Curriculum as the vehicle for completion.

Fullerton College will reduce the achievement gap.

To close the achievement gap, the Foods and Nutrition Faculty inform and encourage student participation in supplemental instruction, the INCITE program, the academic support center, and tutoring services. Each semester, the faculty recommends a student to serve and work as a nutrition tutor so that this service is available to students who are not able to attend SI sessions due to schedule conflicts.

Faculty serve as mentors and advisors for students interested in a career in foods and nutrition. Mentoring students and encouraging them to join the local dietetic association to network and explore career opportunities encourages them to continue with their course of study, resulting in increased retention.

Fullerton College will strengthen connections with the community.

Foods and Nutrition faculty plan field trips to local business’ in the community including grocery store tours, a tofu manufacturing plant, meat production company, and various other business’ which help to strengthen relationships between the college and the community.

Guest speakers may be brought into the classroom from local restaurants in the downtown area of Fullerton to speak on various food related topics and likewise field trips to restaurants specializing in particular cuisines may be planned exposing the students to local business’ and support of the community.

2.0 Program Data & Trends Analysis

2.1 Key Performance Indicators (KPI)

For each KPI listed below, analyze and report your findings and describe what they mean. (Attach 5-year longitudinal data from Office of Institutional Research and Planning (OIRP) to Appendix.)

KPI	Findings
Enrollment	Enrollment in the program has shown a steady increase of approximately 9% over the past five years. Nutritional science and dietetics continues to grow as a career choice with numerous opportunities for employment. In addition, many of the dietetic programs at the Universities are currently impacted. Students who cannot get the courses they need are enrolling in our program to complete the nutrition courses that are transferable.
Total FTES	FTES has increased from 158 to 174. The majority of students are enrolled in Human Nutrition 210. This course fulfills a GE requirement for graduation and students appear to also enroll in the course because they have a personal interest in learning about nutrition.
Sections	The number of sections offered has increased from 33 to 39 over the past five years. We have a high demand for the courses with petition lists for each section averaging 15-16 students.
FTEF	The FTEF has increased from 7.9 to 9.0 with the hiring of two full time faculty to replace two retired faculty. At the end of spring of 2015, a full time faculty will retire and a tenure track full time position will need to be filled in order to support the two remaining full time faculty and the department.
Fill Rate	The fill rate has been above 100% for the past five years averaging at 104%. For the food science/lab course, petition lists are filled enough to warrant a second and sometimes third section of this course.
WSCH/FTEF	Weekly student contact hours have also steadily increased with an overall increase of 9% over the past five years.
Retention	The retention rate in our program has remained stable at 83-85% over the past five years.
Success	The average success rate has increased slightly over the past five years from 68% to a current average success rate of 71%.

2.2 Peer Institution Comparison- Fall 2011-2012; Fall 2012-2013; Fall 2013-2014

Complete the table below.

College/Program:	Our Program	Santa Ana	LA City	Fresno	Modesto
Retention:	F11 87% F12 83% F13 86%	F11 82.64% F12 85.33% F13 89.71%	F11 86.63% F12 86.45% F13 91.79%	F11 83.28% F12 86.17% F13 88.22%	F11 83.6% F12 85.21% F13 88.49%
Success:	F11 71% F12 70% F13 73%	F11 79.17% F12 75.54% F13 75.74%	F11 69% F12 70.12% F13 78.36%	F11 60.12% F12 58.28% F13 54.52%	F11 73.20% F12 79.83% F13 79.37%
Degrees Awarded:	F11 1 F12 0 F13 0	F11 1 F12 2 F13 2	F11 0 F12 0 F13 0	F11 2 F12 0 F13 1	F11 0 F12 0 F13 0
Certificates Awarded:	N/A	N/A	N/A	N/A	N/A
Transfers:					

Retention and Success:

Our program in regards to retention appears to be similar to other programs and has remained stable over the past three years. Our success rate is higher than one peer institution, lower than one peer institution, and similar to two of them. It is important to note however that the data does not reflect the various levels of nutrition courses that are offered within a program.

Very often nutrition courses vary in their level of difficulty depending on whether or not the course is transferable. Within typical food and nutrition departments, there are 100 level nutrition courses while others, such as our program, offer a 200 level course. Our Human Nutrition 210 course, which accounts for the largest segment of our student enrollment is a science course designed for students who are majoring in science, nursing or kinesiology, nutrition and dietetics and/or food science.

Although Human Nutrition 210 is a science course, it also meets one of the GE requirements for graduation therefore many non-science majors enroll in the course in order to fulfill this requirement. Many of these students find the course challenging and difficult. Having a STEM center, continued supplemental instruction, nutrition tutoring, and providing assistance with reading literacy for the sciences will assist in increasing our rates of student success.

Degrees Awarded:

The number of Associate degrees in Foods and Nutrition is almost non-existent. In regards to the work place, employment opportunities with an Associate degree in Foods and Nutrition are limited. To become a Registered Dietitian requires a Bachelors degree from an accredited dietetics program. Students who have declared nutrition as their major are taking our courses in order to transfer to a four year university therefore they may not see the need to obtain an associate degree. Other peer institutions with similar degrees have similar results, granting only 1-2 Associate degrees per year.

Certificates Awarded: Not applicable.

2.3 Achievement Gap- Retention and Success Rates from Fall semesters 2009-2014

Key: AN= Annual 0910 (year of data collection) = 2009-2010

Group	% Retention		% Success	
Males	AN0910	85%	AN1112	87%
	AN1011	85%	AN1213	78%
			AN1314	85%
	AN0910	69%	AN1112	67%
	AN1011	69%	AN1213	64%
			AN1314	66%
Females	AN0910	84%	AN1112	87%
	AN1011	89%	AN1213	86%
			AN1314	88%
	AN0910	70%	AN1112	75%
	AN1011	77%	AN1213	76%
			AN1314	77%
Asian-American	AN0910	90%	AN1112	91%
	AN1011	96%	AN1213	90%
			AN1314	90%
	AN0910	81%	AN1112	80%
	AN1011	81%	AN1213	88%
			AN1314	83%
African-American	AN0910	68%	AN1112	77%
	AN1011	80%	AN1213	77%
			AN1314	88%
	AN0910	32%	AN1112	59%
	AN1011	52%	AN1213	68%
			AN1314	74%
Filipino	AN0910	89%	AN1112	93%
	AN1011	94%	AN1213	88%
			AN1314	84%
	AN0910	74%	AN1112	72%
	AN1011	79%	AN1213	88%
			AN1314	63%
Hispanic	AN0910	79%	AN1112	86%
	AN1011	83%	AN1213	78%
			AN1314	85%
	AN0910	66%	AN1112	70%
	AN1011	65%	AN1213	60%
			AN1314	71%
Native American	AN0910	100%	AN1112	100%
	AN1011	100%	AN1213	83%
			AN1314	100%
	AN0910	33%	AN1112	75%
	AN1011	100%	AN1213	83%
			AN1314	71%
Other Non-White	AN0910	86%	AN1112	0%
	AN1011	71%	AN1213	100%
			AN1314	100%
	AN0910	71%	AN1112	0%
	AN1011	43%	AN1213	100%
			AN1314	100%
Pacific Islander	AN0910	67%	AN1112	100%
	AN1011	50%	AN1213	na
			AN1314	100%
	AN0910	33%	AN1112	40%
	AN1011	50%	AN1213	na
			AN1314	100%
White	AN0910	88%	AN1112	86%
	AN1011	90%	AN1213	87%
			AN1314	87%
	AN0910	72%	AN1112	75%
	AN1011	81%	AN1213	75%
			AN1314	76%
Unknown	AN0910	90%	AN1112	93%
	AN1011	97%	AN1213	76%
			AN1314	75%
	AN0910	78%	AN1112	63%
	AN1011	87%	AN1213	76%
			AN1314	63%
Range (Max-Min)	100-50 % (over five year data range)		81.0%-49.4	

2.4 Program Effectiveness

Since your previous Program Review Self-Study, what significant changes have occurred that impact the effectiveness of your program?

Our program continues to grow in regards to enrollment in Human Nutrition 210, Introduction to Foods 101A course, and our Cultural Foods course. All of our food laboratory courses have fill rates of more than 100% and are offered each semester.

A significant change we have witnessed over the past two years, has been an exceptionally high demand for our Introduction to Foods laboratory course. Students who are currently enrolled in the

dietetic program at California State University, Long Beach are coming to Fullerton College to take this course since the program at the University is so impacted. At our last program review, we were offering this course only one time per year in the fall semester. Recently, we have offered the course in both spring and fall and have had 100% + enrollment each semester. Each semester it is offered, there are enough students petitioning the course to fill another section or two.

This has presented a challenge for the program since it is a course that requires funds to purchase supplies to conduct food science experiments and complete two food preparation labs each week. Last year, we ran out of funds before the semester ended due to insufficient funding for not only this course but to support the three additional food lab courses we offer. If we had increased funding, we would be able to provide additional sections of Foods 101A to students who require it to transfer, in addition to accommodating university students who are unable to enroll in the course at the university.

Likewise, we are training dietitians for the twenty first century in a very out dated facility. The food laboratory classroom was last remodeled in the 1970's. Currently, we have kitchen cabinets that have no bottom panels due to rusting away. Some of the stoves are more than 15 years old and are missing parts that can no longer be ordered and fixed due to being so old and out of date. Having this facility in such poor condition and lacking funds to purchase supplies decreases our effectiveness in meeting the increased demand for these food laboratory courses. This classroom also lacks a "smart station" so our use of technology and technological resources are limited to an outdated lap top and mobile cart with a projector.

On a more positive note, since our last program review, we have been involved with the supplemental instruction pilot study and have been holding SI sessions for Human Nutrition 210 students for the past three years. The program has been very successful with positive student feedback and more importantly increased student success for those who participate. We have expanded the program this fall with the addition of another faculty advisor and next spring will have four SI leaders for the Human Nutrition students. We plan to continue this program and will support a campus wide initiative to bring SI to the Fullerton College campus, across all divisions, and departments.

2.5 Describe any laws, regulations, trends, policies, procedures or other influences that have an impact on the effectiveness of your program. Please include any other data (internal or external) that may be relevant to student achievement, learning, and trends within your Basic Skills, CTE, or Transfer Education programs.

Supplemental instruction data that we have collected and analyzed has indicated that students who attend SI sessions, earn a full grade higher on exams when compared to students who do not attend. SI has been instrumental in increasing student success which is why we now have two faculty advisors along with four SI leaders who will continue to provide this service to our Human Nutrition 210 students. It is our hope, that we can also expand the program and offer SI to students in the Introduction to Foods course to also increase their level of success. SI has been shown to have a definite positive influence on the effectiveness of our program.

In regards to trends, employment of dietitians and nutritionists is projected to grow 21 percent from 2012 to 2022, faster than the average for all occupations. The role of food in preventing and treating

illnesses, such as diabetes, is well known. Registered dietitians and nutritionists will be needed to provide care for patients with various medical conditions and to advise people who want to improve their overall health. As more students become interested in this career field, our program will continue to grow and demand for transfer level courses will continue to escalate.

The last factor that will influence our department is a recently developed transfer model curriculum for Nutrition and Dietetic majors. This will most likely increase student retention and success due to students having a "plan" in place and a goal to reach as they complete their transfer courses within our department. We may also see an increased number of students declaring nutrition as their major since this educational plan will get them a place at the four year college and the employment outlook for this career field is so promising. Having the necessary resources, such as faculty, adequate funding, and facilities to support this growth will be crucial to the effectiveness of the program.

2.6 Provide any other data that is relevant to your self-study.

3.0 Strengths, Weaknesses, Opportunities, Challenges (SWOC)

Based on your analysis in 2.1 through 2.6, answer the following questions:

3.1 What are the strengths of your program?

The Fullerton College Foods and Nutrition program is a strong program that has experienced steady growth of 9% over the past five years and maintains a high demand and fill rate. The program retention is comparable to other institutions at an average of 85% and an average success rate of 70% has been maintained for the past three years. In addition, courses offered are aligned with the transfer model for Nutrition and Dietetic majors giving students the advantage of guaranteed acceptance into four year university programs.

The strengths of the program also align with the mission, vision, and goals of the college. We continue to support increasing student retention and success by providing supplemental instruction and encouraging students to utilize the academic support center, our nutrition tutor, and to volunteer and get involved in the campus and community. We will continue to participate in the annual student health fair, Kindercarmenita, and Worldfest. Next spring, we will officially begin a nutrition club where students can take on leadership roles and plan events that will assist in making our community a healthier one. Faculty continually strives to work collaboratively together while providing individual assistance and mentoring opportunities, internships, supplemental instruction, and providing educational and career advisement to students in need.

Faculty are a strong role model for lifelong learning and two of the full time faculty are currently working towards earning a Teaching and Learning certificate through staff development. Participation in the Habits of Mind initiative, adjunct academy, the Presidents Speaker bureau, involvement in campus committees such as staff development and reading for science literacy exhibit not only a commitment to students but to the campus and college community.

3.2. What are the weaknesses of your program?

Although our retention and success rates are in line with past performance and about average when compared to peer programs, there is room for improvement.

The achievement gap figures indicate that African American students have the lowest average retention rate for the past three years at 80.6% however this percentage has steadily increased from a low of 68% (2009-2010) to a current percentage of 88% (2013-2014). To coincide with campus wide findings, the second ethnicity groups with the lowest retention rates are Hispanic students at a three year average of 83%. In this population group, the percentage has also steadily increased from a low of 79% (2009-2010) to 85% (2013-2014). Encouraging students to utilize supplemental instruction, tutoring, INCITE, and the academic support center has assisted in keeping these students in class. Asian Americans and Whites have the highest average retention rates of 90% and 86.6% respectively.

In regards to success rates, similar trends are apparent. African American students and Hispanic students have the lowest average success rate of 67% over the past three years. In the African American student population, success rates have steadily increased with a low of 32% (2009-2010) to 74% (2013-2014) which is a significant improvement. Hispanic student success rates have also increased but not to the degree seen in the African American students. Hispanic student success rate in 2009-2010 was 66% compared to 71% (2013-2014). Asian American students have the highest average success rate of 84%, Native Americans had the next highest average success rate of 76%, and white students averaged a 75.3% success rate. Additional assessment of the particular needs of these groups needs to be addressed to further increase levels of success. Continuing to provide supplemental instruction, nutrition tutors, and encouraging students to utilize other campus resources will assist in increasing success rates. A STEM center to assist students with reading and writing in the sciences would also be beneficial.

The low number of degrees also needs to be closely looked at to see why students who transfer do not obtain the degree. They are most likely completing all of the degree courses since most of them are required for transfer into the Nutrition and Dietetics program. Collaborating with the counseling and transfer centers may assist in marketing the degree for those students pursuing Bachelor's degrees in Foods and Nutrition. Having some system to flag declared nutrition majors to inform them of the degree would also increase the number of degrees awarded.

Adequate staffing, facilities, funding, and access to technology, needs to be obtained and maintained in order to support the growth of the Foods and Nutrition program. A tenure track faculty member is retiring in June 2015 and we will need to replace the position. Our food laboratory located in room 1017 was last remodeled in the 1970's. Deteriorating cabinets, out dated appliances, and non-ADA compliance counter heights/appliances require remodeling and replacement. We also need a smart station in the food lab classroom in order to utilize current technology. The Master Plan includes plans to renovate this building however there are no plans to demolish the building and rebuild. If we are to accommodate the increasing demand for our food laboratory classes, we need a classroom/lab that can accommodate the latest equipment, tools, and space to provide an adequate learning experience for all students.

3.3 What opportunities exist for your program?

Opportunities for continued growth of success rates and degrees awarded exist. Continued efforts with supplemental instruction, tutoring, INCITE, and the academic support center will be instrumental. A particular need exists to provide support in reading and writing for the sciences for our under prepared, basic skills student population. This could be accomplished with a STEM center, a science boot camp prior to the beginning of the semester, and through the incorporation of science literacy activities and habits of mind concepts directly into the classroom. An on line self assessment tool so that students can access their readiness for taking an on line course may also be useful in increasing the success rates of the on line nutrition courses. More specific tracking of success rates by particular courses offered through the Foods and Nutrition program would also pin point where resources to improve student success are most needed.

Opportunities exist in increasing the number of degrees and transfers. We would like to investigate the opportunity of working with counseling, the transfer center, and admissions and records to identify nutrition majors and make them aware of the degree and what is required to obtain it. Appropriate follow up could then take place. In addition, transfer data would provide useful information that would assist us in tracking our current success rates in this area, set goals for improvement, and be able to measure our level of success.

3.4 What challenges exist for your program?

The most significant challenge we are currently facing is inadequate facilities for our food laboratory classes and insufficient funding to support additional sections of the food lab courses that are in high demand. In addition, this particular classroom is not equipped with a smart station. In order to provide training and education that will prepare students to transfer into Nutrition and Dietetic programs, up to date technology such as a smart station and an adequately equipped and operating food lab classroom are necessities to provide an experience that is competitive and comparable with other institutions that are also providing these courses.

Underprepared and basic skill students will continue to challenge our retention and success rates. A STEM center that can provide assistance with reading and writing skills particularly for the sciences, a boot camp science orientation prior to the beginning of the semester, supplemental instruction, nutrition tutoring, the INCITE program, and additional campus resources will help increase student retention and success.

In regards to staffing, one full time faculty will be retiring in June of 2015 leaving one newly tenured faculty (spring 2014) and one instructor in her second year of tenure track. It is difficult to find qualified adjunct instructors as many Registered Dietitians do not have an advanced degree or are willing to teach food lab classes. Many, who do teach, have full time jobs so their availability to teach classes during the day is limited. A tenure tract position to replace our retiring faculty member will be crucial in maintaining the momentum and success of the department, allowing us to grow and accommodate students who express a high demand for the courses we provide.

4.0 Student Learning Outcomes (SLO) Assessment

4.1 List your program level SLOs and complete the expandable table below.

	Program Student Learning Outcomes (PSLOs)	Date Assessment Completed	Date(s) Data Analyzed	Date(s) Data Used For Improvement	Number of Cycles Completed
1.	Upon successful completion of the courses in the Nutrition and Foods program a student will be able to demonstrate the ability to apply the steps in the scientific method to differentiate between reliable, valid nutrition information versus nutrition misinformation.	Spring semester 2014	Spring semester 2014	Fall semester 2013- Student Learning outcomes	2
2.					
3.					

4.2 Assessment: Complete the expandable table below.

Program Student Learning Outcomes Assessment for Instructional Programs at Fullerton College			
Intended Outcomes	Means of Assessment & Criteria for Success	Summary of Data Collected	Use of Results
1. 90% or more of students will correctly identify valid and reliable sources of nutrition information.	Students need to identify valid and reliable sources of nutrition information on the final exam	Data was collected from final exams in the fall of 2013. 148 students out of 162 or 91% were able to correctly identify valid and reliable sources of nutrition information.	We are meeting this department SLO.
2.			

4.3 What percentage of your program level SLOs have ongoing assessment? Comment on progress/lack of progress.

We have one established program SLO that was assessed one time. It would be beneficial for the department to establish additional program SLO's and set intended outcomes. These would then need to be assessed on an ongoing basis. To make program SLO's more effective we need to determine in what ways they have been found to correlate with success by conducting research and implementing the methods that are utilized. Once we establish this, we can determine if our assessment tool needs to be changed or if a new assessment tool needs to be developed.

4.4 How has assessment of program level SLOs led to improvements in student learning and achievement?

Due to the limited number of program SLO's the data collected has been minimal. It is difficult to assess what effect it is having on student learning and achievement. The program SLO's need to be expanded to incorporate data that is more useful.

4.5 How has assessment of program-level SLOs led to improvements in transfer or certificate/degree awards?

Unfortunately, the limited data available does not allow us to see the effects on transfer rates or degrees earned. Program SLO's need to be revised.

4.6 What challenges remain to make your program level SLOs more effective?

The department needs to revise our program SLO's. We have been doing a good job tracking student learning outcomes with the various courses we offer, however we need to revise and develop additional program SLO's to reflect results of our student learning outcome data and research how these can correlate to student success.

5.0 Evaluation of Progress Toward Previous Goals/SAP's (Future program review templates for this section will identify "previous goals" as "previous *strategic action plans*"-- SAP's.)

5.1 List the goals from your last self-study/program review.

Our goals from our last self study/program review were:

- A. Hire a tenure tract position to replace a retired instructor
- B. Offer Foods 101B Introduction to Food Management course in Spring 2012
- C. Investigate the possibility of offering the ServSafe course for students to obtain certification
- D. Investigate developing and offering a foods class geared to the student who is not a Foods and Nutrition major or allied health major to provide them knowledge and skills so that they can prepare basic, healthy meals for themselves
- E. Alteration of food lab kitchen unit to meet ADA requirements

5.2 Describe the level of success and/or progress achieved in the goals listed above.

- A. A tenure tract position was approved and filled in the fall of 2012
- B. The Foods 101B course was offered and taught in the spring of 2012. In the spring of 2013 it was offered again. Unfortunately, there was insufficient enrollment to teach the course with only 4 students enrolling. It is an elective course and not required by most of the transfer programs therefore students did not see a need to take this course. During curriculum review this year, the course was deleted.
- C. In our research, it was discovered that the ServSafe course is offered on line and has open enrollment. It is very inexpensive. If we were to offer this course, the tuition would be more costly than taking the course on line.
- D. When the budget crisis hit and nutrition courses had to be cut, the goal of developing a new course was shelved until a later date. No further action has been taken on accomplishing this goal.
- E. Met with Paul McKinley from Disabled Student services to discuss options for altering the flooring of one of the food lab units with temporary/portable platforms that could be disassembled and reassembled as needed. Investigated and researched kitchen ranges that would meet ADA criteria. Since funds were not allocated, the budget did not accommodate making these provisions.

5.3 How did you measure the level of success and/or progress achieved in the goals listed above?

- A. The tenure tract position was filled.
- B. Students were polled as to why they did not enroll in the course. Their responses were tallied. The most common response was that the course was not required to transfer and that it was a block class that took up too much time compared to other courses that the students needed to take. (the class was four hours twice a week) They did not want to spend the time nor money taking a course that they did not need.
- C. We looked at the advantages and disadvantages of offering the course. It was determined that the disadvantages outweighed the advantages. We did however consider the idea of imbedding the ServSaf course within the context of the Foods 101A course which is still under investigation.

- D. Since this goal could not be funded, we did not pursue or complete it.
- E. Since this goal could not be funded, we did not pursue or complete it.

5.4 Provide examples of how the goals in the last cycle contributed to the continuous quality improvement of your program.

- A. Hiring a full time tenure tract position allowed the department to offer additional sections of program courses that are in high demand. For example, it allowed us to offer a Spring section of the Foods 101A course, which typically was only taught in the fall. This met the high demand for this course by not only our Fullerton College students but also allowed university students to enroll. Currently, the program at CSULB is so impacted, that students cannot get into this course at that campus and they are enrolling to take it within our department.
- B. Omitting the Foods 101B course from our curriculum initiated a closer look into the department's curriculum. Our six year curriculum review process was completed this year and has led to changes in the courses that meet the degree requirements. The Cultural Foods course which meets the multicultural requirement for graduation is now a course that also meets the Foods and Nutrition degree. This is a course where we experience high demand and one that we will have no difficulty in meeting required fill levels.
- C. Offering the ServSaf certificate as part of the Foods 101A course will place our program above others who provide this course. Students will leave the course with a certificate that would enable them to work as a food service employee and may increase their marketability when searching for employment in the food service industry.
- D. We are a program that strives to meet student needs. We continue to see the need for a foods course that teaches students basic food preparation techniques that results in healthy meals. Our plan is to decide if this course is something we still want to pursue or update the Foods 60 course, Foods for Fitness, to encompass a broader approach to healthy food preparation and nutrition information.
- E. We need our courses within our program to be easily assessable to all students. A remodel of the food lab (which did not take place) would allow us to safely, conveniently, and appropriately accommodate students with disabilities. A remodel of the kitchen could include altering one unit by lowering counter top food preparation areas, sinks, ovens, and provide a kitchen layout that is comfortable to work in for all students.
- F.

5.5 In cases where resources were allocated toward goals in the last cycle, how did the resources contribute to the improvement of the program?

- A. Without funding and approval for the tenure tract position, it is highly unlikely that additional sections of courses could have been offered. Expansion of the Foods 101A course to fall and spring offerings could not have occurred and the effectiveness of the program would have suffered. Students wanting these courses would not have been able to enroll due to classes being filled and lack of additional sections being offered.
- B. Additional funding was not needed to meet goal B.
- C. Funding was not received for this goal however it is still something we are considering. We may imbed it into a course that we are currently offering.
- D. No resources received for this goal.

E. No resources received to fund the remodel.

5.6 If funds were not allocated in the last review cycle, how did it impact your program?

- D. Since funds were not available to pursue developing and adding a new course, this goal was not completed. The department is currently discussing whether a course that is currently being offered meets the objectives of this new course or if a new course still needs to be developed.
- F. Two years ago, we had one student who was in a wheelchair and who enrolled in one of our foods courses. She worked in one of the end units of the lab and used the dining tables as her work surface since the counter tops within the kitchen unit were too high to accommodate her. She however had to drop the class after attending only one session due to medical issues she was experiencing. Not having a kitchen unit that can accommodate these students is detrimental to our program and does not align with ADA compliance.

6.0 Strategic Action Plans (SAP) [formerly called Goals (6) and Requests for Resources (7)]

Using the tables below, list the strategic action plans (SAPs) for your program. These plans should follow logically from the information provided in the self-study. Use a separate table for each SAP.

SAPs for this three-year cycle:

STRATEGIC ACTION PLAN # 1	
Describe Strategic Action Plan: (formerly called short-term goal)	Remodel the food laboratory (last remodel in 1970's), room 1017, with updated cabinets, appliances, and redesigned work space. Remodel one kitchen unit to accommodate ADA requirements with lowered kitchen counters, lowered range and sink area, in addition to adequate work space. Install a smart station so technology can be used in the classroom. Support high demand transferable food lab courses with sufficient funds to adequately cover all supplies for the academic year.
List College goal/objective the plan meets:	College Goal 1: Fullerton College will promote student success. Objective 2: Increase course retention and success by respecting and valuing the diversity of our entire community and student population.
Describe the SAP: (Include persons responsible and timeframe.)	The 1000 building has been earmarked for renovation as part of the Master Plan. There are no plans to demolish the building and rebuild. Remodeling room 1017 to include a smart station, new cabinets, counter tops, new appliances, and redesigning the work space to be more efficient would increase the effectiveness of the courses that are taught in this room. In addition, one of the kitchen units needs to be altered to meet A.D.A. requirements with lowered food preparation surfaces, lowered sinks, ranges, and microwaves, and adequate work and mobility space to accommodate those in a wheelchair. College contractors would be responsible for construction and remodel. Ideally, this project could be completed over summer 2015 when no food lab courses are offered.
What <i>Measurable Outcome</i> is anticipated for this SAP?	Increased retention and success rates of students enrolled in the four food laboratory courses that we teach. Compliance with A.D.A. requirements and students personal satisfaction with an environment that accommodates their disability and does not inhibit their ability to either enroll in the course or successfully fulfill the course requirements.
What specific aspects of this SAP can be accomplished without additional financial resources?	No remodeling or renovation of the food lab classroom can take place without additional financial resources. A smart station cannot be put in place without additional funding. Sufficient funds to purchase all necessary supplies for food labs cannot be accomplished without additional financial resources.

If additional financial resources would be required to accomplish this SAP, please complete the section below. Keep in mind that requests for resources must follow logically from the information provided in this self-study.

Type of Resource	Requested Dollar Amount	Potential Funding Source
Personnel Contractors, builders, installers	-	
Facilities		
Equipment 2 new ranges 7 double sinks/faucets Counter tops for six kitchen units and demo kitchen counter top Cabinets for six 10 X 10 kitchen units and cabinets for demo kitchen counter Five microwaves ADA compliant kitchen sink, oven	\$80,000-100,000	
Supplies Groceries and small kitchen equipment for food science experiments and food preparation labs- 4 courses per semester/2 semesters/3 years	\$ 27,000.00	
Computer Hardware Smart Station Ceiling projector	\$1000.00	
Computer Software	\$300.00	
Training		
Other		
Total Requested Amount	\$108,000-\$128,000	

STRATEGIC ACTION PLAN # 2

Describe Strategic Action Plan: (formerly called short-term goal)	Hire one full time tenure track faculty to adequately support the program.
List College goal/objective the plan meets:	College Goal #: Fullerton College will promote student success. Objective #: Increase the number of transfers. Increase the number of degrees awarded. Increase course retention and success.
Describe the SAP: (Include persons responsible and timeframe.)	A hiring committee will be formed with approval for replacement of a faculty member scheduled to retire in June of 2015. Hiring committee will be formed in the spring of 2015 for a new tenure track position to begin in the Fall of 2015.
What <i>Measurable Outcome</i> is anticipated for this SAP?	A new tenure track Foods and Nutrition faculty is hired and begins in the Fall semester 2015.
What specific aspects of this SAP can be accomplished without additional financial resources?	This is a replacement position. No additional funding is required with the exception of the new hires salary which replaces the salary of the retired faculty.

If additional financial resources would be required to accomplish this SAP, please complete the section below. Keep in mind that requests for resources must follow logically from the information provided in this self-study.

Type of Resource	Requested Dollar Amount	Potential Funding Source
Personnel One full time faculty for Foods and Nutrition to replace retiree	\$65,000	
Facilities		
Equipment		
Supplies		
Computer Hardware		
Computer Software		
Training		
Other		
Total Requested Amount	\$65,000	

STRATEGIC ACTION PLAN # 3

Describe Strategic Action Plan: (formerly called short-term goal)	Establish a STEM center where science students can receive support, tutoring, improve their science literacy and writing skills. As part of the STEM center, establish and hire a STEM research coordinator who will assist majors with educational plans, resumes, and statements of intent. The coordinator will also assist with scholarship applications and assist undergraduate research opportunities. Lastly, the coordinator can develop a data base so students can be tracked as they transfer and find employment; they can also collect and evaluate course specific data for retention and success.
List College goal/objective the plan meets:	College Goal 1: Fullerton College will promote student success. Objective : 1. Address the needs of underprepared students. 2. Increase course retention and success rates particularly of African American and Hispanic student by 2% 4. Increase the number of transfers. 5. Increase the persistence rate of students.
Describe the SAP: (Include persons responsible and timeframe.)	This initial SAP targets Geology, Earth Science majors, and STEM majors in other departments and divisions. As the STEM center is developed, it would be beneficial to hire a Foods and Nutrition STEM coordinator who could perform similar functions as listed in the SAP but focus more on the Foods and Nutrition majors. They could assist with collecting, evaluating, and summarizing transfer data, success and retention rates, and other markers of program success. They could also assist students in applying for nutrition scholarships, completing transfer applications, and other similar tasks that would help the students succeed.
What <i>Measurable Outcome</i> is anticipated for this SAP?	Data collected and evaluated would support tracking of retention and success rates particular to the Foods and Nutrition program. Results would provide information on specific courses offered within the Foods and Nutrition program relative to the achievement gap, retention, success, and transfer rates. This would indicate whether or not the program is meeting it's goals and objectives.
What specific aspects of this SAP can be accomplished without additional financial resources?	None, unless we can obtain external funds.

If additional financial resources would be required to accomplish this SAP, please complete the section below. Keep in mind that requests for resources must follow logically from the information provided in this self-study.

Type of Resource	Requested Dollar Amount	Potential Funding Source
Personnel STEM Foods and Nutrition Undergraduate Assistant @ \$45.00 per hour for 4 hours per week for 16	\$17,280	College Planning and Budget Steering Committee

weeks/semester for 2 semesters/year for 3 years		
Facilities		
Equipment		
Supplies		
Computer Hardware		
Computer Software		
Training		
Other		
Total Requested Amount	\$17,280	

STRATEGIC ACTION PLAN # 4

Describe Strategic Action Plan: (formerly called short-term goal)	Obtain approval to hire a 50% permanent classified food lab clerk/ technician. Hire a lab clerk/technician to begin in the Fall of 2015. Having a lab clerk/technician will allow additional time for the instructor to assist, mentor, and provide guidance to students enrolled in the foods courses.
List College goal/objective the plan meets:	College Goal 1: Fullerton College will promote student success. Objective: 1. Address the needs of under-prepared students. 2. Increase course retention and success. 3. Increase the number of degrees earned. 4. Increase the number of transfers. 5. Increase the persistence rate of students.
Describe the SAP: (Include persons responsible and timeframe.)	Once approval is obtained for this position, the department will work with Human Resources to develop a job description and the position will be posted. Interviews will be conducted by the department staff and the best candidate will be hired. Have a lab clerk hired by Fall of 2015.
What <i>Measurable Outcome</i> is anticipated for this SAP?	We can track and monitor success and retention rates of students enrolled specifically in the foods courses. We can look at the effect of having increased instructor availability to assist struggling students, those under prepared, or those requiring mentoring/advising.
What specific aspects of this SAP can be accomplished without additional financial resources?	We have hired a student from the on campus work study program to assist us in the food lab this semester however once these students graduate, we have to go through the process of finding another student. The students need to qualify for work study but also need experience in the food lab environment to successfully fulfill the responsibilities of the position. These two requirements are difficult to find.

If additional financial resources would be required to accomplish this SAP, please complete the section below. Keep in mind that requests for resources must follow logically from the information provided in this self-study.

Type of Resource	Requested Dollar Amount	Potential Funding Source
Personnel 50% classified food laboratory clerk/technician \$1521-1842 per 10 month academic year @ 3 years	\$4563-5526	
Facilities		
Equipment		
Supplies		
Computer Hardware		
Computer Software		
Training		
Total Requested Amount	\$ 4563-5526	

7.0 Long Term Plans

Describe the long term plans (four-six years) for your program. Please consider future trends in your narrative. (Identifying financial resources needed for these plans is optional.)

The long term plans for the Foods and Nutrition department is to continue to provide a sufficient number of courses to accommodate the growing need for nutrition and dietetic health professionals. The Bureau of Labor and Statistics states that nutritional science and dietetics continues to grow 21 percent from 2012 to 2022, faster than the average for all occupations. It is also a career choice with numerous opportunities for employment. In the next 4-6 years we have faculty interested in teaching on line courses and a Human Nutrition Honors course so these would be goals we would like to start to develop over the next few years.

We see ourselves continuing to promote student retention and success by providing and encouraging students to utilize support services such as supplemental instruction, nutrition tutoring, INCITE, and the academic support center. If a STEM center is developed, we see a Foods and Nutrition STEM coordinator assisting our students in transfer applications, scholarships, and utilizing an extensive data base to track retention, success, and transfer rates, of our Foods and Nutrition majors.

If the University Nutrition and Dietetic programs continue to be impacted, we hope to provide additional sections of the courses that are in high demand such as our Foods 101A course and Human Nutrition. In order to do this though, additional funding will be required for supplies utilized in teaching these courses.

In the next few years, we will strive to increase the number of earned Food and Nutrition degrees. We can do this by identifying our nutrition majors at an earlier stage and encouraging them to obtain the degree while meeting their transfer requirements. Aligning our degree requirements with the transfer model will also result in more AS degrees being earned while guaranteeing students a place at the four year college.

As faculty, we will continue to strive for personal improvement in our teaching skills by our continued attendance at staff development programs and through attendance of other continuing education programs. We will continue to be role models of collaborative learning as we work together as a team to connect our students to the campus and to our local community.

8.0 Self-Study Summary

This section provides the reader with an overview of the highlights, themes, and key elements of this self-study. It should not include new information that is not mentioned in other sections of this document.

The Foods and Nutrition program is an integral part of Fullerton College preparing students to become successful learners as they enhance their personal knowledge of nutrition or complete transfer level courses toward earning their Bachelors degree in Nutrition and Dietetics. We, as a department, share and support the college mission, values, and goals promoting student success, working towards closing achievement gaps, and strengthening connections with the community.

The program has experienced steady growth of 9% over the past five years and demand is high with fill rates of over 100%. The program retention is comparable to other institutions at an average of 85% and an average success rate of 70% has been maintained over the past three years. In addition, courses offered are aligned

with the transfer model for Nutrition and Dietetic majors giving students the advantage of guaranteed acceptance into four year university programs.

The strengths of the program align with the mission, vision, and goals of the college. We continue to strive toward increasing student retention and success by providing supplemental instruction and encouraging students to utilize the academic support center, nutrition tutoring, to volunteer and be involved in the campus and community. We will continue to participate in the annual student health fair, Kindercarmenita, and Worldfest. Next spring is the official start of the nutrition club where students can take on leadership roles and plan events that will assist in making our community a healthier one.

Faculty are a strong role model for lifelong learning and are currently working towards earning the Teaching and Learning certificate through staff development. Participation in the Habits of Mind initiative, adjunct academy, the Presidents Speaker bureau, involvement in campus committees such as staff development and reading for science literacy exhibit not only a commitment to students but to the campus and college community. Faculties collaboratively work together yet also provide individual assistance and mentoring opportunities, internships, supplemental instruction, and educational and career advisement to students in need.

The weaknesses of the program are similar to other programs across campus in terms of retention and success rates. African American students have the lowest average retention rate at 80.6% however this percentage has steadily increased from a low of 68% (2009-2010) to a current percentage of 88% (2013-2014). Likewise, Hispanic students have an average retention rate of 83% and similar to the previous group, the percentage has steadily increased from a low of 79% (2009-2010) to 85% (2013-2014).

In regards to success rates, similar trends are apparent. African American students and Hispanic students have the lowest average success rate of 67% over the past three years. In the African American student population, success rates have steadily increased with a low of 32% (2009-2010) to 74% (2013-2014) which is a significant improvement. Hispanic student success rates have also increased but not to the degree seen in the African American students. Hispanic student success rate in 2009-2010 was 66% compared to 71% (2013-2014). Assessment of the particular needs of these groups needs to be addressed to further increase levels of retention and success. Continuing to provide supplemental instruction, nutrition tutors, and encouraging students to utilize other campus resources will assist in increasing success rates. A STEM center to assist students with reading and writing in the sciences would also be beneficial.

The low number of degrees also needs to be closely looked at to see why students who transfer do not obtain the degree. They are most likely completing all of the degree courses since most of them are required for transfer into the Nutrition and Dietetics program. Collaborating with the counseling and transfer centers may assist in marketing the degree for those students pursuing Bachelor's degrees in Foods and Nutrition. Having a system to flag declared nutrition majors and implementing an outreach program to inform them of the degree would also increase the awareness and number of degrees awarded.

Student SLO's are established and our department has completed two cycles of data collection however we need to improve our program SLO's and align them to reflect our student learning outcomes. It will be our goal to correlate our program SLO's with student success, retention, and degrees earned. We also need to establish a plan for ongoing assessment of program SLO's once they are established.

Opportunities to increase success rates and the number of degrees awarded exist. Continued efforts with supplemental instruction, tutoring, INCITE, and the academic support center will be instrumental in addition to supporting reading and writing for the sciences for our under prepared, basic skills student population. This could be accomplished with a STEM center, a science boot camp prior to the beginning of the semester, and through incorporation of science literacy activities and habits of mind concepts directly into the classroom. An on line self assessment tool so that students can access their readiness for taking an on line course may also be useful in increasing the success rates of the on line nutrition courses. More specific tracking of success rates by particular courses would also pin point where resources to improve student success are most needed.

The most significant challenge we are currently facing is inadequate facilities for our food laboratory classes and insufficient funding to support additional sections of the food lab courses that are in high demand. In addition, this particular classroom is not equipped with a smart station. In order to provide training and education that will prepare students to transfer into Nutrition and Dietetic programs, up to date technology such as a smart station and an adequately equipped and operating food lab classroom are necessities to provide an experience that is competitive and comparable with other institutions that are also providing these courses.

In regards to staffing, one full time faculty will be retiring in June of 2015 leaving one newly tenured faculty (spring 2014) and one instructor in her second year of tenure track. It is difficult to find qualified adjunct instructors as many Registered Dietitians do not have an advanced degree or are willing to teach food lab classes. Many, who do teach, have full time jobs so their availability to teach classes during the day is limited. A tenure tract position to replace our retiring faculty member will be crucial in maintaining the momentum and success of the department, allowing us to grow and accommodate students who express a high demand for the courses we provide.

Most of our short term goals were achieved since our last program review. We hired a full time tenure track instructor to replace a retiree, we completed our six year curriculum review, we implemented a new course than omitted it from our degree requirements since we discovered that it is not a required course at the four year colleges; we investigated the possibility of offering a certificate ServSaf course; and met with disabled student services to see what could be done to our food lab to accommodate disabled students. The goals that were not met due to the budget crisis was developing a new foods course and remodeling of the food lab.

Our current strategic goals are to:

1. Remodel the food laboratory to update equipment and cabinets that were initially installed in the 1970's in addition to customizing one kitchen unit to meet A.D.A. regulations. Install a smart station so that technology can be utilized in the classroom. Obtain adequate funding in order to purchase lab supplies for the full fiscal year.
2. Hire one full time tenure track faculty to adequately support the program and replace a faculty member scheduled to retire in Spring of 2015.
3. Support a STEM center in the Natural Sciences Division to provide support and resources to students enrolled in various science courses across disciplines. Eventually, we would like to hire a Foods and Nutrition STEM assistant that could develop a data bank that could track our success and retention rates of specific courses taught within the Foods and Nutrition department to better direct resources to courses that need them the most. This assistant can also aid students in scholarship applications, transfer applications, letters of intent, and in other areas that would help them to succeed.

4. Hire a permanent food lab assistant (classified employee) that would inventory, order, organize, store, and set up lab supplies for all four food lab courses. This would enable the instructor to spend more time mentoring, advising, and directing students so that they can be more successful in achieving their educational goals.
5. Continue offering supplemental instruction to our Human Nutrition students and expanding SI to also include the Introduction to Foods transfer course.
6. Develop and offer a Nutrition Honors course.
7. Expand the number of sections of the on line Human Nutrition course.
8. Revise and align our program SLO's to our student SLO's correlating them with student success, retention, and degrees earned.

These goals will help support the ongoing mission, values and goals of the department and the college and create an environment of increased achievement and success.

Division Deans' or appropriate Immediate Management Supervisor (IMS)
Response Page

I concur with the findings contained in this Program Review.

I concur with the findings contained in this Program Review with the following exceptions (include a narrative explaining the basis for each exception):

Area of exception:

I do not concur with the findings contained in this Program Review (include a narrative exception):
