



**Instructional Program Review – Annual Update  
2020**

Date:	June 18, 2020
Program and Department:	Agriculture Program, Life and Physical Sciences Department
CTE Program?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Additional programs included in this review:	
Date of last comprehensive review:	April 2019
Submitted By:	Erin Krier
Attachments (* as needed):	<input type="checkbox"/> 6-year assessment plan – All programs, when applicable <input type="checkbox"/> 2-year scheduling plan <input type="checkbox"/> Justification for Resource Requests (if needed)

*Due to the COVID-19 Pandemic, traditional Program Review has been suspended in order to refocus faculty on Emergency Remote Teaching. Instead, this modified version of the Annual Update will be used—Comprehensive Program Reviews have been pushed to the next regular semester of instruction.*

Please Refer to last year’s Annual Update/Program Review and only make updates to the following fields if they have changed/justify a new program resource need.

**I. Alignment of the Program with the AHC Mission**

**AHC Mission: Allan Hancock College provides quality educational opportunities that enhance student learning and the creative, intellectual, cultural, and economic vitality of our diverse community.**

a. Have there been any changes that would require a change to your Program Mission?

Since the Agriculture Program began official development in 2017 with the launching of degrees and certificates, the program mission has expanded in scope to include a much more diverse set of skills and knowledge that can be attained at Allan Hancock College. The original program mission statement only referred to the Agricultural Science degree and certificate because that was the first program available to agriculture students. Since that time, two transfer degrees have been added, two stackable certificates have been approved by AP&P, and another certificate will be launched during Summer 2020. Therefore, the Program Mission will need to be expanded to include the more diverse educational opportunities now available to agriculture students.

- b. Explain how your program mission aligns with the college mission.

The college mission and values can be found here:

[http://www.hancockcollege.edu/public\\_affairs/mission.php](http://www.hancockcollege.edu/public_affairs/mission.php)

The agriculture program at Allan Hancock College aligns with the mission of the college in that through strong industry relationships students are provided with current and relevant skills and knowledge. Students in the agriculture program will therefore be prepared for employment in mid-level local careers which will improve the vitality of our largely agricultural community on many levels. This program also serves to offer career opportunities to populations that have traditionally been underserved in preparing for local, higher-wage earning positions without a 4-year degree, such as first-generation college students, minorities and women.

## II. Student Success, Program Accessibility and Program Capacity

\*NO data analysis required this year.

- a. Describe how the program works to promote student success (completions job placement, transfer). Include teaching innovations and use of academic and student support.

One of the recent program improvements that directly increases student success in program completion, job placement, and transfer to university, is a new course that was offered for the first time in Fall 2019 and also in Spring 2020. AG 100, Introduction to Agriculture Studies and Careers, is targeted at students who are interested in agriculture as a general pathway but may not have the guidance and direction to know the best plan to suit their interests, talents, and goals. This course enjoyed good enrollment numbers and proved successful in providing students with guidance that led to a deeper understanding of local agricultural career opportunities, how their passions and talents best fit in the industry, and exactly what path they need to follow to lead to completion, transfer and career readiness.

Additionally, the continued involvement of agriculture students in the Young Farmers and Ranchers club, which operates in collaboration with the Santa Barbara County Farm Bureau, provides a critical interaction with industry partners who offer guidance, improve student awareness of job opportunities and inform students of issues facing local agriculture that can influence their career choices. The engagement of an active, industry-based advisory committee further aligns students with career opportunities and guides the program to provide locally relevant knowledge and skills.

Furthermore, a strong working relationship with Cal Poly State University in multiple capacities has proven to ensure successful transfers into the many agriculture programs desirable to Allan Hancock College transfer students. Two new Associate Degrees for Transfer, in Agricultural Business and Agricultural Plant Science, have been available and awarded for the first time in Spring 2020 – providing even more opportunities for successful transfer to CSUs.

- b. List any notable accomplishments of the program (student awards, honors, or scholarships can be listed here also)

The agriculture program continues to enjoy press attention, which helps to inform the community and prospective students about the expanding program offerings.

There have also been 15 concurrent enrollment agreements signed and approved between the regional high school agriculture programs and the Allan Hancock College agriculture program, which will further promote the expanding program offerings to local high school agriculture students.

Also notable is the increase in course, certificate and degree offerings. Five new courses in Agricultural Plant Pathology, Economic Entomology, Weed Science, Qualified Applicator Training and Introduction to Agricultural Studies and Careers are in the catalog for the first time this year. Two new certificates in Crop Protection and Pest Control Adviser Preparation have been approved by AP&P and should be ready to offer in Spring 2021. Significant interest in these new courses and certificates continues as prospective students, many of whom have worked in the industry for years, seek this valuable option to move into an upper level position within their company. Our two new ADTs in Agricultural Business and Agricultural Plant Science are now approved and being awarded to deserving students.

### III. Quality and Innovation in the Program and Curriculum Review

- a. Are you on track in your assessment plan for course and program SLOs? If not, please explain why.

Utilizing the new program learning outcomes assessment cycle dashboard, the agriculture program is completing Part 0 – Initial Planning in Spring 2020 and will begin with Part 1 – Review and Plan in Fall 2020. This is on track with the college’s recommended schedule.

- b. Have you shared your assessments or improvement plans with your department, program or advisory committee? If so, what actions resulted? If not, how do you plan to do so in the future?

The assessments and improvement plans are shared regularly with the agriculture advisory committee. All faculty members of the agriculture program are on the advisory committee, and therefore have been provided with the updates. The department is only updated regarding additions or changes to the curriculum when department approval is required.

- c. Did any of section, course or program improvement plans indicate that your program would benefit from specific resources in order to support student learning and/or faculty development? If so, please explain.

The agriculture program has been extremely limited in laboratory space and restricted in use of current Life and Physical Sciences laboratory equipment. There is not a dedicated lab area for the agriculture program and when existing physical and biological science labs are attempted for use, it creates significant scheduling and practical conflicts.

Many of the hands-on and/or laboratory activities in the agriculture courses occur in the student farm, where the variety of vegetable plots, the fruit orchard, and the greenhouse provide essential learning opportunities. However, to adequately prepare agriculture students for the modern era of crop production, these courses must have access to indoor laboratory space and modern equipment.

Furthermore, with the addition of three new lab-based courses (Agricultural Plant Pathology, Economic Entomology, and Weed Science) and an industry-driven push for plant genetic examination and research, the field-based living laboratory will no longer suffice as our only hands-on resource. It is not possible for students to learn any of these subjects to the depth expected by universities and industry without having access to indoor laboratory activities.

Additionally, a full-time faculty position will be crucial to the long-term success of the agriculture program. The work required to develop, maintain, support, and promote this program in addition to the instructional responsibilities can only be accomplished by a full-time faculty. This position should be not only teaching but also include the work of a program coordinator.

Finally, a full-time classified student farm manager to run the daily operations in tending to this living laboratory would significantly improve the experiential opportunities of this program. A manager would provide course support similar to a laboratory technician – preparing and maintaining the vegetable garden, fruit orchard, greenhouse, and production vineyard.

- d. In reviewing your outcomes and assessments have you identified any and all that indicate a modification should be made to the course outline, the student learning outcomes or the program outcomes? Please state what modifications you will be making.

The program outcomes were reviewed in Spring 2020 and all program courses that contribute to each program outcome were identified. The program and course outcomes appear to be well aligned at this time.

- e. Have all course outlines been reviewed within the last 5 years? If not, please explain the plan to bring course outlines up to date and include timelines for the review and submission to AP&P.

Yes, all course outlines in the agriculture program were reviewed within the last 2 years. Updates to textbooks, learning outcomes, and course content were all made per instructor, advisory committee, AP&P, academic counselor, articulation officer, and dean recommendations. Additionally, several major course modifications continue to be launched as pre- and co-requisites are recommended from student and faculty input.

- f. For **CTE courses/programs only**, as per §55003, have prerequisites, corequisites and advisories (PCAs) for courses and/or programs been reviewed within the last 2 years?

Yes, all course outlines in the agriculture program were reviewed within the last 2 years. Updates to textbooks, learning outcomes, and course content were all made per instructor, advisory committee, AP&P, academic counselor, articulation officer, and dean recommendations. Additionally, several major course modifications continue to be launched as pre- and co-requisites are recommended from student and faculty input.

AG 160, Plant Propagation & Production, was determined to need a prerequisite that would provide students with a familiarity of basic plant biology, therefore a prerequisite modification was launched in Summer 2020 to require either AG 161 (Introduction to Plant Science) or BIOL 154 (General Botany).

It also became evident from instructor and student feedback that both AG 161 (Introduction to Plant Science) and AG 152 (Introduction to Animal Science) should advise students to have a basic understanding of biological principles. Therefore, a modification for each course was launched to add BIOL 100 (Introductory Biology) as an advisory.

#### IV. Focus and Engagement of the Program

- a. Summarize major trends and opportunities as well as challenges that have emerged in the program

The agriculture program continues to be in a period of rapid expansion, with community support and outreach proving to be driving forces in its development. This program is being well received on many levels throughout the community and the enthusiasm is palpable for the development of this program which is long overdue in the Santa Maria Valley. High schools, elementary schools, community organizations and industry leaders continue to reach out with a desire to collaborate and participate in the growth and establishment of the agriculture program.

The biggest challenges facing the agriculture program are: (1) it is completely powered by part-time faculty and (2) it lacks laboratory space and resources.

- (1) The program coordinator and main instructor is currently temporary full-time, funded largely from external grant sources. All other instructors in the program are part-time faculty who by the nature of their assignments do not provide the consistency and dedication needed for the program to fully realize its potential. The part-time faculty generally lack the desire to participate in any aspect of the program other than teaching their assigned course. This leads to a relatively disconnected program whereby students can suffer from an absence of energy and time devoted to their courses.
- (2) The agriculture program has been extremely limited in laboratory space and restricted in use of current Life and Physical Sciences laboratory equipment. There is not a dedicated lab area for the agriculture program and when existing physical and biological science labs are attempted for use, it creates significant scheduling and practical conflicts.

b. List any (internal or external) conditions that have influenced the program in the past year.

There has been tremendous external support for and interest in the new and expanding agriculture program. This attention and energy have provided conditions which aid in the promotion of the program and all that it has to offer. Internally, there is also a lot of administrative and faculty support for the changes and improvements to this program. The AP&P committee and counseling staff have been particularly helpful in the program development. The AHC Public Affairs department has provided significant resources to promote the new program via multiple internal and external media pathways.

Very strong and continuing partnerships with Cal Poly State University and all high school FFA programs in our region have provided students a clear and smooth pathway from high school through AHC and on to transfer to the desirable agriculture program at the university. Cal Poly State University has partnered with our agriculture program to provide paid summer undergraduate research projects to our students. Cal Poly also has partnered with us on many collaborative grant applications, one which has been funded that brings a unique and valuable produce safety training program to AHC students and the Santa Maria underserved farming community as a whole.

With 15 concurrent enrollment agreements now active between AHC and the area FFA programs, interest and enrollment in the agriculture program continue to enjoy growing numbers.

The support from Guided Pathways funding to develop and institute a Field to Table Week of Welcome event, where incoming students in any of the connected disciplines of Agriculture, Viticulture & Enology, Food Science & Nutrition, and Culinary Arts & Management, are invited to explore these programs, their facilities, student services, and industry partners, has further added to the successful transition from high school to college and beyond.

**Data for Program with Vocational TOP Codes (CTE):**

[http://www.hancockcollege.edu/institutional\\_effectiveness/reports.php](http://www.hancockcollege.edu/institutional_effectiveness/reports.php)

Please review the data and comment on any trends.

c. Current industry employment and wage data (please cite sources)

According to the State of California Employment Development Department (EDD), the number of annual job openings in Santa Barbara County for those with knowledge and skills in general agriculture, plant science, pest control advising and agricultural business is expected to be nearly 200. The average hourly wage earned by Farmers, Ranchers and Other Agricultural Managers is \$32.63 while the average hourly wage earned by First-line Supervisors and Managers of Farms is nearly \$20.00.

Considering the employment opportunities in the state of California for these same occupations, there is expected to be over 10,000 job openings annually with an average hourly wage earned of \$33.66.

d. Industry employment and wage trends


One of the most significant additions to the agriculture program this year is the coursework that will prepare students to take the Pest Control Adviser licensing exam. The need for new licensed Pest Control Advisers (PCAs) is so great in California agriculture, that the California Association of Pest Control Advisers (CAPCA) has been making intentional efforts to reach out to community colleges and four-year universities to encourage students to follow curricular pathways that will lead to qualifications for taking the PCA licensing exam. This employment need is great in the Santa Maria Valley and the average starting wage for those possessing their PCA license is \$60,000 with a company truck and full benefits.

The average age of production farmers in America is over 60 and there is a critical shortage of younger farmers filling those roles. In order to encourage students to pursue this viable and essential career path, Allan Hancock College agriculture partnered with Cal Poly's F.E.E.D. program (Farmer Experiential Education and Development). Through this program, Hancock students complete 4 agriculture courses at Hancock and then participate in a semester-long hands on farming program at Cal Poly's large and diverse student farm. This program trains students in production agriculture from planting through harvest, sales and marketing and includes training on use of agricultural equipment and modern farming techniques.

The agriculture program at Allan Hancock College along with its expanding curriculum will prepare students for employment in many industry sectors where the need is great and the wages are of living values.



e. TOP code employment CORE indicator report



California Community Colleges Chancellor's Office  
 Management Information Systems Division  
*Career Technical Education (CTE) (Perkins IV)*

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You are here : Core Indicator Reports/Performance Trend By Core Indicator

Performance Trend By Core Indicator - Parameter Selection Area

Select Indicator Type

Core 4 - Employment ▼

Select College Name

Allan Hancock College ▼

Select Fiscal Year

2020-2021 ▼


Select TOP Code

01 Agriculture and Nat ▼

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Performance Trend By Core Indicator - Report

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**PERKINS IV Program Performance Trend Report**  
 Core Indicator Four - Employment  
 2020-2021 Fiscal Year Planning

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4- and 6-Digit Top Codes available on Sheets 2 and 3 when exported to Excel (tabs at bottom of worksheet window).

DISTRICT: ALLAN HANCOCK COLLEGE: ALLAN HANCOCK  
 01 Agriculture and Natural Resources

	Percent			Count			Total		
	2015-2016	2016-2017	2017-2018	2015-2016	2016-2017	2017-2018	2015-2016	2016-2017	2017-2018
<b>Program Area Total</b>	87.50	80.00	86.67	14	20	26	16	25	30
Female	90.91	80.95	85.71	10	17	12	11	21	14
Male	80.00	75.00	93.33	4	3	14	5	4	15
Non-traditional	100.00	83.33	100.00	5	5	7	5	6	7
Displaced Homemaker	100.00			1	0	0	1	0	0
Economically Disadvantaged	85.71	76.47	82.61	12	13	19	14	17	23
Limited English Proficiency			100.00	0	0	1	0	0	1
Single Parent		100.00	100.00	0	1	1	0	1	1
Students with Disabilities		50.00	0.00	0	1	0	0	2	2
Technical Preparation				0	0	0	0	0	0
Migrant				0	0	0	0	0	0
<b>District</b>	87.50	80.00	86.67	14	20	26	16	25	30
<b>State</b>	77.32	76.21	76.63	9,722	9,584	10,258	12,573	12,575	13,386

4- and 6-Digit Top Codes on following pages.

Success rate less than 73.23% is shaded

Indicator Four: Employment - 73.23% Performance Goal

Indicator Four uses 2017- 2018 enrollments in Apprenticeship, Advanced Occupational or Clearly Occupational courses (coded with SAM Priority codes A-C). Students may be enrolled in more than one program area and may be included in more than one population grouping.

Source: CCCC MIS Database
Page 1 of 3
Report Create Date: 02/01/2010

f. Advisory committee recommendations

Advisory committee recommendations included:

1. Continue to promote community awareness of new agriculture program offerings
2. Consider adding food safety curriculum in the future, to include water microbial issues – collaboration with AHC microbiology program is suggested
3. Establish internships with industry partners
4. Consider adding plant biotechnology coursework
5. Establish planned Precision Agriculture courses and certificate
6. Continue to expand on the newly established Field to Table collaboration between the Agriculture, Viticulture & Enology, Culinary Arts & Management, and Food Science & Nutrition programs
7. Further expand and utilize the student farm as a living laboratory
8. Establish a dedicated teaching and lab space for the agriculture program courses
9. Address agriculture laws and regulations in the curriculum – addition of regulatory interpretation course to understand this complex and pervasive issue
10. Provide educational opportunities for understanding natural resource conservation and environmental issues facing agriculture – collaboration with AHC environmental science program is suggested
11. Consider establishing a certificate designed to prepare students to take and pass the Certified Crop Adviser licensing exam – especially soil health and nitrate management
12. Improve the integration of agriculture into the industrial technology program to provide employers with the skilled workforce needed to diagnose, repair, engineer, and manufacture automated equipment for the ag industry

**V. Continuous Improvement of the Program**

a. Status of Final Plan of Action – Post Validation

Summarize the progress made on the recommendations from your last comprehensive program review plan of action

PLAN OF ACTION	ACTION TAKEN/RESULT AND STATUS
Hire a Full-time Agriculture Coordinator/Instructor	Through funding from a National Science Foundation Advanced Technological Education grant, the agriculture coordinator/instructor has been working under a stipend to cover the increased hours demanded to run the new agriculture program. A full-time position was listed on the prioritization list for future consideration.
Improve and maintain the “living laboratory” student garden and fruit orchard to create an effective environment where agriculture students can participate in valuable experiential learning activities.	2-3 student workers have been employed working in the student garden and fruit orchard all year. Significant improvements are noticeable as the care for these living laboratories has increased with this labor force.
Improve agriculture part-time faculty program involvement and increase industry and university experiences to improve instruction and SLO assessment	The USDA funding for which we applied to provide part-time ag faculty with industry-based learning externships was denied. Therefore, this goal has not yet been realized.
Use a “farm to table” model to increase collaboration between AHC agriculture, viticulture, enology, nutrition and culinary programs	With financial support from a CTEA grant, a new cross-disciplinary project was initiated in Fall 2019 and saw tangible results in Spring 2020. This Field to Table collaboration brought together students and faculty from the Agriculture, Viticulture & Enology, Culinary Arts & Management, and Food Science & Nutrition programs to plant, maintain, harvest, prepare, cook, and distribute student-grown produce from the AHC student farm. This program will continue into 2020-2021 to further demonstrate the connected nature between these programs in the working industries.
Establish a “Week of Discovery” to adequately welcome and prepare incoming agriculture students and their families	A successful Field to Table Week of Welcome event was launched in Fall 2019. This 2 ½ day event provided incoming students in any of the connected Field to Table disciplines (Agriculture, Viticulture & Enology, Culinary Arts & Management, Food Science & Nutrition) with the formative opportunity to engage with program coordinators, program facilities, successful recent graduates of each program, student services, and fellow incoming students. This event will continue to be hosted on an annual basis.
Establish a Precision Ag Program	A skilled part-time faculty was hired for 2019-2020 to work on the development of this program. The introductory precision agriculture course was created and launched and has been approved by the AP&P Committee. This part-time faculty continues to work on the advanced course, the certificate, and the degree.

b. List any new resources that the program received in the past year and the results

Source	Specific Resource	Est. Amount \$	Impact on program or course outcomes
Grant Funds	CTEA	\$8855	Allowed for the hiring of a part-time faculty to assist in the development of the collaborative Field to Table program between the Agriculture, Viticulture & Enology, Food Science & Nutrition, and Culinary Arts & Management programs. Also provided funds for supplies to improve production of crops on the student farm.
Grant Funds	NSF ATE	\$225,000 (over 3 years)	Allowed for the additional hours required by coordinator to establish Crop Protection and Pest Control Adviser pathways. Provided the funding to start development of a Precision Agriculture pathway. Provided for outreach to industry partners and high school FFA programs. Will provide funding needed to purchase equipment and supplies for the new Precision Agriculture program.
Grant Funds	USDA Produce Safety Outreach	\$27,583.36 (Sub-recipient amount from larger grant received by Cal Poly State University)	Established a strong working relationship with Cal Poly State University Food Science, Agribusiness, and Agricultural Communication professors while creating a Produce Safety Alliance student and grower community training program at AHC.

c. List any new or modified recommendations below, including rationale for these in the table.

Program Improvement Plan (Program, Priority Number, year)	Anticipated Outcome (Goal)	Program Goal Status (Indicate if this goal is ongoing from a previous Annual Or Comprehensive Program Review or new this year).	Alignment to Strategic Directions and planning goals (see "Alignment to Strategic Directions" Attached	Activities	Justification (Evidence of need)	Resource Request (From table Below)	Anticipated Completion Date or On-going
1. Hire FT agriculture program coordinator /instructor	Long-term consistency for program development and maintenance	This is an ongoing goal from previous program reviews	This goal is aligned with Strategic Direction Goal IR1 – to recruit and retain quality employees and E1 – community integration, which ultimately supports Strategic Direction Goal SLS2 – to support student access, achievement and success	<ol style="list-style-type: none"> <li>1. Prioritize a FT agriculture program coordinator/instructor position</li> <li>2. Fill this position with a qualified individual</li> </ol>	A dedicated FT faculty position in the agriculture program is essential to the continued success of this rapidly developing program	Staffing	Ongoing

<p>2. Establish a dedicated laboratory and classroom space for agriculture courses</p>	<p>Students in the agriculture program will have the space and equipment necessary for quality learning experiences</p>	<p>While this has been an ongoing and unmet need since the inception of the agriculture program, this goal has not appeared in previous program reviews</p>	<p>This goal is aligned with the following Strategic Directions: SLS2 – to support student access, achievement, and success; IR4 – to provide a safe, attractive, and accessible physical environment that enhances the ability to teach, learn, and work</p>	<p>1. Locate and establish a dedicated space for both lecture instruction and laboratory experiences specific to agriculture courses 2. Purchase laboratory supplies needed for the new lab space</p>	<p>Without adequate learning facilities, the students in the agriculture program lack the resources necessary for optimal learning</p>	<p>Facility</p>	<p>Ongoing</p>
<p>3. Hire a classified farm technician</p>	<p>A dedicated staffing position will adequately manage the operational needs of the “living laboratory” student farm (vegetable garden, fruit orchard, greenhouse, and vineyard)</p>	<p>While this has been an ongoing and unmet need since the inception of the agriculture program, this goal has not appeared in previous program reviews</p>	<p>This goal is aligned with the following Strategic Directions: SLS1 – to ensure continuous improvement based on SLO assessment data; IR1 – to recruit and retain quality employees; and IR4 – to provide a safe, attractive, and accessible physical environment that enhances the ability to teach, learn, and work</p>	<p>1. Prioritize a classified farm technician position 2. Fill this position with a qualified individual</p>	<p>A dedicated farm technician is essential for the maintenance of this valuable living laboratory space. Students consistently experience improved learning outcomes when they have access to a well-maintained farm lab space.</p>	<p>Staffing</p>	<p>Ongoing</p>

<p>4. Establish an industry partnership for an agriculture enterprise project</p>	<p>Creation of an industry-based farm production and agribusiness sales &amp; marketing project using a partner farm and barn produce sales stand</p>	<p>This is a new concept added to program review for the first time this year</p>	<p>This goal is aligned with the following Strategic Directions: SLS2 – to support student access, achievement, and success; IR4 – to provide a safe, attractive, and accessible physical environment that enhances the ability to teach, learn, and work; E1 – community integration</p>	<p>1. Develop a model for an industry-based farm production enterprise project  2. Establish an official partnership with farm manager industry partner  3. Prepare and launch a new farm enterprise course  4. Establish a farming operation and direct-to-consumer sales stand in partnership with grower partner</p>	<p>Based on input from students and advisory committee industry partners, there is a need for students to have access to an enterprise learning model for improvement of knowledge and skills needed for future employment in the agriculture industry</p>	<p>NSF ATE Supplemental Funds are being sought to support this project</p>	<p>Spring 2021 – Fall 2021</p>
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<p>5. Expand the Field to Table collaborative program</p>	<p>Aid students in exploring and comprehending the interdisciplinary connectivity between food and beverage production, food science, nutrition, and culinary arts</p>	<p>This is an ongoing program goal indicated in previous program review</p>	<p>This goal is aligned with the following Strategic Directions: SLS2 – to support student access, achievement, and success; SLS3 – to ensure students are directed; SLS6 – to engage students; SLS7 – to ensure students are connected; SLS8 – to value student contributions</p>	<p>1. Increase crop production at student farm 2. Engage students from each of the Field to Table disciplines in student farm work, food preparation and sampling, food and wine pairing, sales and marketing, and program promotion across campus</p>	<p>There is a natural connection between these programs yet a lack of collaboration. This plan will improve student opportunities and also engage the community at large</p>	<p>Previous CTEA grant support may be requested for renewal to continue the Field to Table program</p>	<p>Ongoing</p>
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6. Complete the development of the Precision Ag Program	To fulfill the requirements of the NSF grant award, this new pathway will be fully developed	This is an ongoing program goal indicated in previous program review	This goal is aligned with the following Strategic Directions: SLS2 – to support student access, achievement, and success; E1 – community integration	1. Add new courses in GIS and GPS with agriculture applications and in Precision Agriculture 2. Create a Certificate of Achievement in Precision Agriculture 3. Create an A.S. degree in Precision Agriculture 4. Purchase advanced supplies as needed for the new program	Industry input has confirmed that the need for employees trained in this subject is great	NSF grant funds already secured	Spring 2021
7. Expand on Produce Safety program to develop food safety curriculum	To meet a significant industry need in preparing students for the critical role in produce safety work required under the Food Safety Modernization Act	This is a new concept added to program review for the first time this year	This goal is aligned with the following Strategic Directions: SLS2 – to support student access, achievement, and success; E1 – community integration	1. Train additional students in the PSA Grower Training course, led by Erin Krier and Cal Poly USDA PSA grant team 2. Explore the possibility of adding a course specific to produce safety for student academic training	Industry input has confirmed that the need for employees trained in this subject is great	USDA grant funds already secured, AHC is subrecipient of grant with Cal Poly as lead institution	Spring 2021

<p>8. Explore new curriculum concepts in agriculture laws &amp; regulations; natural resource management ; and certified crop adviser preparation</p>	<p>To meet significant industry needs in preparing students for the essential workforce training in regulations affecting ag production , natural resource management, and crop advising</p>	<p>This is a new concept added to program review for the first time this year</p>	<p>This goal is aligned with the following Strategic Directions: SLS2 – to support student access, achievement, and success; E1 – community integration</p>	<p>Explore the possibility of adding the following courses to the AHC agriculture curriculum: Introduction to Agricultural Regulatory Compliance, Agricultural Natural Resource Management, and Certified Crop Adviser Preparation</p>	<p>Industry input has confirmed that the need for employees trained in this subject is great</p>	<p>Funds for additional curriculum development may be requested from NSF, CTEA, and/or USDA</p>	<p>Ongoing</p>
<p>9. Develop a collaboration with the AHC industrial technology program to establish ag machining, engineering, and manufacturing curriculum</p>	<p>To meet significant industry needs in preparing students for the essential workforce training in agricultural industrial trades</p>	<p>This is a new concept added to program review for the first time this year</p>	<p>This goal is aligned with the following Strategic Directions: SLS2 – to support student access, achievement, and success; E1 – community integration</p>	<p>Explore the possibility of integrating agricultural engineering, machining, mechanics, and manufacturing with the existing AHC Industrial Technology program</p>	<p>Industry input has confirmed that the need for employees trained in this subject is great</p>	<p>Funds for additional curriculum development may be requested from NSF, CTEA, and/or USDA</p>	<p>Ongoing</p>

d. Summary of request for resources. Please list the type of request (facility, technology, staffing, equipment, other) and rank their priority.

Resource Requests (Program, RRX year)	Item	Program Goal	Type	One-time cost	On-going cost (per fiscal year)	Anticipated Completion Date or On-going
1. Staffing	Full-time Ag Coordinator/ Instructor				\$70,000	ongoing
2. Facility	Dedicated laboratory and classroom space for agriculture courses			Unknown cost		
3. Staffing	Student Farm Manager				\$40,000	ongoing