



Fullerton College Program Review and Planning Self-Study for Instructional Programs Fall 2021

Statement of collaboration

The program faculty members 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 comprehensive self-study.

Participants in the self-study

Jeffery Feaster
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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 and Planning Committee.

Jeffery Feaster

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December 14, 2021

Date

1.0 Executive Summary (Please write this section last, but include it here at the front of the self-study, on a page all by itself.)

Please provide the reader with a brief overview of the highlights, themes, and key elements of this self-study. Please don't include new information you did not discuss earlier. Although you will likely write this section last, please remember to put this summary at the front of your report.

The Horticulture Department, in the Natural Sciences Division, has undergone major changes since the last program review, these changes are both in the facilities themselves and in the personnel of the department. Late in the spring semester of 2018, I was notified that our full-time faculty member would be leaving, and that our Laboratory Technician of 20 years was retiring. This was devastating news on both fronts, I became a one man show beginning in June. While we were able to hire a replacement Lab Tech in relatively short order, the hiring of a replacement instructor did not occur until the third try this past spring. During these three years many things fell through the cracks like CSLO assessment and input, PSLO redesign, and program mapping. On the bright side, we hired outstanding adjunct faculty members to fill the void, we continued to offer quality classes, we brought back the interns after a hiatus, and we had plant sales just as we always did. The facilities also had major renovations. We were approved with Strong Workforce funds to construct a new, state of the art greenhouse. This project became much larger in scope because we couldn't just build a greenhouse, everything then had to become ADA compliant. All hard surfaces in the department were torn up and repaved, ramps to the greenhouse were installed, and drainage from the greenhouse flows directly to the sewer, bathroom renovation. All of this work caused major disruption to the department, fortunately for us, all the major construction happened during the school closure because of Covid. With the completion of this project we are now poised to resume offering Hort 255 Aquaponics/ Hydroponics. The greenhouse has one side designated exactly for this purpose. Many of our classes will utilize the greenhouse, and it will be a production area for tomatoes and peppers.

As indicated by the data provided by OIE, our program has declined in just about all metrics since AY 17/18 in comparison to the college as a whole. Enrollments, sections offered, degrees awarded all declined significantly. We were able to maintain a consistent course completion and success rate, and actually increased our success rate to 81.3% compared to 69.1% for all other programs during AY 20/21. As we analyze demographics of the students, we seem to be less attractive to the younger students compared to the rest of the college, we feel we can make inroads into this group with our partnership and exposure with the Orange County Farm Bureau. There is much work to do in program mapping, PSLO redesign, CSLO collection and input, we have created two of our SAP's to serve as reminders to make progress in these areas. With the hiring of a new faculty member I am confident that significant progress can be made towards these goals.

SAP #1 is requesting a groundskeeper for the Horticulture department, this was not approved in the last PR, with the addition of the greenhouse facility we will devote more of the interns' time and effort in its maintenance, leaving less time for the landscape.

As we move into next semester, and resume in person instruction, with classes that have not been offered in a while, I am hopeful that we will start to see increases in the enrollments, degrees and certificates awarded, and that we continue to be a resource to the local community with our plant sales, our wealth of knowledge and expertise in all things related to horticulture

2.0 Mission

Please explain briefly how your program contributes to the College's [mission, vision, core values, and goals](#). Highlight any new contributions since your most recent self-study. If your department has a mission statement, please share it. If not then please consider discussing one with your colleagues.

The Horticulture department supports the Fullerton College **mission** of offering flexible pathways for students who seek education and career growth, certificates, associate degrees and transfer. The Horticulture department offers a wide variety of certificates for students looking to gain a particular skill set for job advancement. We also offer an AA, and AS for transfer to four year institutions. Many individuals take our classes for more personal reasons like improving their landscape or installing or repairing an irrigation system, and a multitude of other skills that will help them at home. Some students even start their own businesses. As instructors in a vocational program we love to see our students' transition into the workforce. We also support the college mission by fostering a supportive and inclusive environment for our students. The horticulture students are a diverse group both in age and ethnicity. We have first time college students, and students of retirement age. Everyone has the same opportunities, whether it is in the classroom or out. They participate in group projects, work in the gardens and greenhouses together. These activities encourage its members to be responsible towards one another

Our vision and goals as instructors in the Horticulture department supports the **vision** of the college for positive change. In almost all of our classes we are teaching students about sustainability. We encourage students to grow their own food, conserve and recycle water, reduce their chemical and fertilizer footprint by planting plants that encourage beneficial insects and replenish nutrients back into the soil. As students participate in our hands on classes, they are inspired to try these skills at home. These small and transformative lessons can impact our local communities' one household at a time. More recently we understand the impact that a global pandemic can have on the supply chain, and our food supply. The skills and knowledge acquired from our diverse range of class offerings prepares individuals to grow at least some of their own food.

Core Values: The Horticulture department being set apart from the main campus has developed its own sense of community with our own students. There is a cohort of students that move through the program together, this builds strong community. Our interns who are both horticulture students and employees of the department, spend many hours per week in the department and build strong relationships not only with each other but the faculty and staff as well.

The facility is open for division and campus functions, as well as the community. We host the Fullerton Beautiful garden tour, we have 3 large plant sales each year which attracts hundreds of visitors to the facility.

The faculty and staff are constantly learning new skills and about new plant material by attending various workshops and visiting nurseries, and garden center. We can then pass these skills and

knowledge to our students. We support the involvement of all in the decision making process, and expect to be involved in all aspects of the renovation of the Horticulture department, and to provide input on plant material for other parts of campus.

We support innovation and have recently completed the construction of a state of the art greenhouse, which is a vast improvement from our much older greenhouse. Hopefully during the Fall 2022 semester we will once again start offering one of our flagship courses Aquaponics/Hydroponics in the new facility. Finally, as mentioned earlier, we accept the responsibility for the betterment of the world by teaching and demonstrating to our students sound horticultural skills that minimize the ecological footprint that we all impart on the planet

College Goals: As a department we are constantly working to improve the success and retention of our students. Most of our courses have extensive college level reading as part of the curriculum. To assist underprepared students, lectures and other course materials including chapter summaries, study guides, and links to video are routinely posted onto Canvas.

With Tableau, we now have access to data that can be used to understand and identify where specifically the achievement gaps are. This will allow us to make more informed decisions. We no longer have to wait for program review to view data, as long as this data base is continually updated.

We have received outside funding for the department from grants, and strong workforce and will continue to apply for more. We are constantly involved in community outreach by being a resource for plant problems, plant identification, as well as a source of information for people looking to hire landscape professionals. We continue to reach hundreds of community members through our plant sales.

3.0 Students

Because there is a nearly infinite amount of student data that can be studied, please focus your analysis on the trends that stand out. The Office of Institutional Effectiveness (OIE) is providing data that will help you zero in on bottlenecks, gateways, and student equity issues. As per accreditation standards, OIE data will be broken down by race, ethnicity, gender, and other demographic categories. One of the purposes of this section is to identify inequities and make plans to remedy them.

3.1 Enrollment demographics

1. Using the data provided by the OIE, briefly describe the enrollment trends in the program over the past five years.

The enrollment trends in the horticulture department have shown a steady decline since academic year (AY) 17/18 which had a high of 378 enrollments to a low of 208 in AY 2021 which is a – 39.4 % change, this is also reflected by a similar decline in the unduplicated student headcount of -26.5%. This is compared to the college as a whole of -11.8% and 11.7% respectively. During the academic year 16/17 two new courses were offered for the first time, Hort 250 Permaculture design, and Hort 255 Hydroponics/Aquaponics. These two courses were extremely popular and unique to the local community colleges with horticulture programs, hence we were able to attract students who may

not have attended Fullerton College. While the students were here, they took additional classes, so the gap between enrollments and unduplicated students increased. We were excited with these increases, unfortunately the full time faculty member teaching these classes abruptly resigned after the Spring 18 semester.

The Horticulture Department is staffed by 1 full time faculty member, and one member whose load is 50% horticulture, and 50% biology. The full time horticulture instructor typically teaches 4-5 unique CRNs/ semester. For the Fall 18 semester we reduced the course offerings and hired 3 new adjunct instructors to fill the void until a full time replacement could be hired. In AY 18/19, and 19/20 we were unsuccessful at hiring a new full time faculty replacement, and enrollments remained constant, 283 and 288 respectively.

During the AY 20/21 we experienced our lowest enrollment of 208, this is directly related to the number of sections offered (12) from a high of (21) in AY 17/18. The low number of sections offered in AY 20/21 is directly linked to Covid, and the remote nature of instruction. As a vocational program our courses most often involve a laboratory portion, which has a hands on, learn by doing component as well as a separate lecture. After discussion with the adjunct faculty, and the difficulties encountered while teaching labs remotely after the shutdown in March 2020, we determined that very few courses could be taught entirely remote, so course offerings were limited in the AY 20/21. We did get approval to offer a limited number of in person labs for a few courses, these were offered at a reduced seat count by about ½ capacity, all courses also met outdoors to reduce the exposure risks, with increased social distancing

The course offerings in the Horticulture department have also declined the past 5 years. This is due to the same reasons as mentioned above. Expertise to teach certain courses was lost, adjunct instructors have other jobs and are limited on when they can teach, and how many units they can teach.

2. Using the data provided by the OIE, describe the student population the department serves. Do you have a way of determining which students are majors, for example through a gateway course? Please explain.

The student population that the Horticulture department serves is slightly different than the college as a whole. We have a higher % of college graduates @ 14% vs. 7%. As a result our students are slightly older, 45% are 25+ years vs. 26% for the college, and thus our students seem less inclined to transfer 66% vs. 77% for the college. The Horticulture department seems less attractive to younger students 16% under 20 vs 32% for the college. This looks like an opportunity for outreach to local schools which will be discussed later.

The data provided by OIE indicates that we have zero majors in the Horticulture program. I am not sure how to address this issue, I believe by my direct communications with students that there are horticulture majors. In fact, we just had one of our interns/students transfer to UC Davis as a Horticulture major. Another indicator of horticulture majors would be the higher than average % of students that take 24+ units /year in the Horticulture department, 37% in horticulture vs. 22% in other programs. This indicates that they are taking 3 to 4 classes per semester, therefore I would consider them horticulture majors regardless of what box was checked when they applied to the college. Lastly, we do offer two introductory courses in horticulture that I would consider gateway

classes. Principles of Horticulture I and II. Principles of Horticulture I is offered every Fall semester, and Principles of Horticulture II every Spring semester. These courses give an overview of horticulture as a science, and neither count towards the general education requirements of transfer institutions. While we do have a student population, especially older students take horticulture classes because they own a home, enjoy gardening and want to increase their knowledge, I expect that most of the individuals taking these 2 classes (Hort I and Hort II) to be serious horticulture students.

When looking at student enrollments by Race/Ethnicity/Ancestry two things stand out. We seem to serve a higher percentage of White students 25.5% vs 16% to other programs, and an equally lower percent of Latinx students 46.6% vs 57.7% to other programs. I would expect the Horticulture department to mirror other programs and have no explanation as to why this occurred.

We also serve a higher percentage of students that are low income about 83%, even though these numbers seem high they still have relatively high course completion rates of 82.4% and success rates of 71.4%

3. Which classes have the highest demand and why? Are they offered regularly -- at different times of the day and week, in different formats (in-person, on-line, hybrid)? Please explain. Horticulture 152 Applied Botany has our highest enrollment and we offer the most sections. This class meets the needs of our horticulture students as it is a course found in many of our degrees and certificates, and it also meets the needs of students looking to complete the CSU life science with a lab requirement. Based on polling conducted at the beginning of the semester, the majority of these students are not Horticulture majors. We offer at least two sections of this class per semester, and try to offer one evening class per year.

Principles of Horticulture I and II are both offered once per year in alternating semesters, most of these students would horticulture students for the reasons mentioned in 3.1.2. These classes are offered mid-day or morning. It is more of a safety concern to have students working outdoors at night, digging, planting, pruning without adequate lighting, hence these courses are rarely offered in the evening.

4. Please describe how course offerings match students' preparation and goals.

Very few of our courses have prerequisites so a student can take most classes during any given semester. Our goal is to offer a variety of courses each semester so students can achieve a certificate in two years. Each certificate has required courses and elective courses, so we focus on making sure the required courses are offered on a rotating schedule. It has been a challenge the past four years to maintain this schedule with the loss of our full time faculty member, and not being able to offer some classes due to the Covid restrictions.

The college catalog denotes certain courses as only being offered in the Fall semester, and others in the Spring semester. This allows students to plan their schedules more effectively. We as faculty counsel them on what and when to take certain classes depending on their academic or career goals. The Horticulture department being a small department having only two classrooms, we purposefully schedule classes so there is no overlap except in the evenings, so students can take most classes offered in a given semester without conflict. We do offer evening classes for our

working student population, but with few exceptions it would be extremely difficult to complete most certificates by attending only evening classes. We do not offer any online classes.

5. Does enrollment vary by semester? Please describe how course offerings are adjusted to meet student demand and help students reach their academic goals.

I would say that enrollment in any given academic year, Fall and Spring semester are equal, but as shown in the data provided by OIE enrollments vary from year to year. Adjustments in course offerings is difficult due to how far in advance the schedule is created. We are responding to student needs in the upcoming semester (Spring 22) by offering courses that are designated as being taught in the Fall semester as per their designation in the course catalog due to Covid. This will prevent students from having to wait to take these classes the following Fall semester. We are well aware of our students desire to progress towards their academic goals and make adjustments when possible within the constraints of the scheduling timeline

3.2 Student Achievement and Equity (and student demographic profile)?

1. Using the data provided by the OIE, briefly describe student achievement rates in your program over the past five years: completion, success, degrees/certificates, transfer, licensing, job placement, wage improvements (not all of these measures apply to every program).

The Horticulture department exhibited relatively static completion rates in the five years of data provided by OIE except AY 18/19 we had a + 4.7% increase in the completion rate. This did not increase the success rate in a similar manner. The major difference when looking at available data is the number of unduplicated students dropped by 43 from the previous year. Were these returning students more likely to complete a class? One can only speculate. Our completion rates are similar to all other programs 83.2% compared to 82.4%

Course success rates are also similar and static during the five years of data until AY 20/21 where we had a +10% increase in success. Our success rate increased to 81.3% while other programs remained around 70%. We will attempt to explain this in section 3.5

Program awards have had a similar and probably more significant decline compared to enrollments. It makes sense that as enrollments decline there would be a drop in awards as well. Most students whose academic goal is to transfer pursue an AA/AS degree and they make sure the paperwork involved is completed. It appears in the 5 years of data provided by OIE that we have only awarded AA /AS degrees. The associate degrees awarded the past 5 years is 47, but during AY 20/21 there were only 4 degrees awarded. We offer many certificates, and I find it hard to believe that there have been no certificates of any type awarded to our students. Students can usually earn a certificate while completing the requirements for an associates. The Horticulture department used to have a yearend awards BBQ, and about one month before we would post fliers in the classrooms notifying students to check to see if they qualify for any type of award. We would then help them with the process. We have not had the BBQ in the last three years, so maybe student are not even thinking about these awards. This may be a reflection of several factors, lower enrollments, reduced course offerings, and lack of student awareness.

The number of students transferring is low. As a vocational program many students are here to gain skills and knowledge for job growth, wage increases, or just taking classes for fun. Many students don't come into the program thinking about transferring to a four year program.

It is interesting to note that since AY16/17 we have awarded associate degrees to 30 individual students, but during that same time period only 8 students have transferred to a 4 year institution. As a recipient of strong workforce money we do not appear to have any data on job placement and wage improvement. Further investigation will be necessary to determine why.

2. Please pay special attention to equity issues -- where a group of students has an achievement rate that is below average. What factors can explain this?

The Horticulture department has a success rate in the Latinx student population of 67.2%, this is similar to the entire colleges success rate by Latinx students of 66.1%. If we look at the same data by income, there is a -6% gap between low income and not low income. I would hate to attribute low income status to a particular ethnicity so I won't. There are programs in place to reduce the financial burden of going to college such as the North Orange County Promise, the Anaheim Pledge, and the Fullerton Partnership that provide 2 years of college tuition. It is impossible to identify the root causes of the success gap in Latinx students. I have looked at the test scores for the Anaheim School District. Reading proficiency ranges from 59% to 44%, and math ranges from 25% to 13%. Is this part of the problem, most likely, but that still doesn't address or identify the root cause.

We do have a fairly large proportion of students in the low income category at 83%, the success rate is lower than non-low income students 71% vs 77%, and this could be an issue as far as having reliable internet, computers and textbooks. Since many of our students are older based on the data provided, most of them probably do not qualify for any of the programs listed above since they are not recent high school graduates.

3. Does the department have regular discussions about equitable grading, attendance, late-work, and extra credit policies, or about other strategies for helping students succeed? Could reforming classroom policies help more students succeed? Please explain.

As the sole full time member of the Horticulture during this PR cycle I have not had departmental discussions, but I have been involved in similar meetings with the biology faculty which I am also a part of. We have discussed and implemented several strategies especially during the pandemic. Canvas allows more flexibility in the examination process, it is much easier to schedule make-up exams, extend the time for taking exams, and allow for multiple attempts for selected quizzes. I have also been more flexible in allowing assignments to be turned in late, and graded without penalty. The adjunct faculty in Horticulture have extended the same flexibility to the students. We all understand that learning and teaching remotely is not ideal for both parties. There are disruptions in the home, technology issues that keep students from attending class. Posted materials and recordings can help fill in when a student is absent and would otherwise miss class content. We have seen a 10% increase in student success in AY20/21.

4. Please write a brief Equity Action Plan. What strategies can you implement to close this gap in student achievement within the next five years? What professional learning, curriculum development, or other forms of support does your department need?

After looking at the KPI data on Tableau, the success rate for all courses, across all programs is 66.1% for Latinx students. This data suggests that this is an institutional problem. If we really want to reduce this equity gap in success rate we might want to put the expertise and resources of Fullerton College to look into this. I would like to see a recommendation of 5-6 best practices, and give each program the task of tailoring them to meet the specific needs of each program.

I feel ill-equipped to write an equity plan, certainly more training would be helpful. The Horticulture department did have a 10% increase in the Latinx success rates in AY 20/21, so we will certainly look into the ways that classes were handled remotely, and how we might maintain similar protocols as we move back to face to face teaching.

3.3 Student Achievement and Pathways

1. Using the data provided by the OIE, briefly describe how students have moved through the program over the past five years: unit accumulation, prerequisites, corequisites, substitutions, gateway courses, and bottleneck courses. (Not all of these measures apply to every program.)

This question is very difficult to assess for the various programs in the Horticulture department, especially at the certificate level. Each certificate has a list of required courses, the bottleneck occurs at this level. If a class is cancelled, or not offered in a timely manner then a student would not be able to earn that certificate. The data provided by OIE does not address this question. Our goal is to offer the required courses on a rotating basis so each course would be offered in a two year time frame.

We have previously mentioned that our gateway courses are Hort I, and Hort II, these classes have been offered 1x per year for the last 5 years of data provided by the OIE. Based on the data, students have access to these courses, there is a fairly high success rate 72% for Hort I, and 80% for Hort II. This indicates a positive experience for a student's early introduction into the field of horticulture.

Other data provided by the OIE on page 19 of appendix A is inclusive as far as other potential bottlenecks in the Horticulture department. For example when looking at courses with the highest percent withdrawals, Hort 157 Irrigation Principles had a withdrawal rate of 37.5%. This class has been offered once in the past five years, had an enrollment of 8, meaning 3 students withdrew. I can't draw any conclusions from this data due to a small sample size. There are many other examples in this data that I could expand on in a similar manner.

2. For transfer degree programs: Are your current requirements in line with the Transfer Model Curriculum, or have you added extra steps, such as prerequisites? If you added extra steps, please explain.

We do not have a transfer degree.

3. Please provide an update on the curriculum mapping you have done, perhaps in collaboration with Counseling. Are all programs (degrees and certificates) mapped? Based on course offerings for the last two to three years, could a student complete the map(s) you have created? If so, please demonstrate this with some facts from your schedules. If not, how will you address these discrepancies?

At this time we have only mapped one program, the Associates of Science in Ornamental Horticulture

Required courses (9) units Restricted electives (12) units

Semester 1 Fall 18	Hort 155 Soils	3 units
	Hort 160 Tree Identification	3 units
Semester 2 Spring 19	Hort 161 Shrub Identification	3 Units = 9
	Hort 174 Plant Propagation	3 units
Semester 3 Fall 19	Hort 200 Landscape Design	3 units
	Hort 156 Plant Nutrition	2 units
Semester 4 Spring 20	Hort 165 Landscape Mgt.	4 units
	Hort 173 Greenhouse & Nursery	3 units = 15 need 12*

*This is just one combination of classes that would get to the required unit count in two years

4. Do the data reveal differences among your AA, ADT, or certificate programs (in enrollment, completion, or success, for example)? Please explain.

We do not offer an ADT

3.4 Faculty

1. Using the data provided by the OIE, briefly describe the faculty workload over the past five years: FTF (full-time faculty), PTF (part-time, or “adjunct” faculty), FTEF (full-time equivalent faculty), WSCH per FTEF (weekly student contact hours). (Not all of these measures apply to every program.)

As mentioned in section 3.1.1 the Horticulture department had a full time faculty member resign. This resignation resulted in the majority of classes being taught by adjunct faculty. AY 17/18 the Horticulture department offered 21 CRN’s, the following year after the resignation we offered 15 CRN’s. AY16/17 and 17/18 the percentage of sections taught by full time faculty was 72% and 67% respectively. The following 3 years only 25% of sections were taught by full time faculty.

After 3 years we have been successful in hiring a tenure tract full time faculty member.

The fill rate during the past 5 years is 87.5%, the low is 80.9%, this is when we offered 21 CRN’s so there were more options for students. The highest fill rate was 94.6% in AY20/21 when we had only 12 CRN’s offered, fewer options for students resulted in higher fill rates.

The average class size in the Horticulture department is 18.3 for the past 5 years, with a high of 19.1, and a low of 17.5. The Horticulture department has 2 classrooms, one is lecture only and has a capacity of 25, the other is lecture/lab room that holds 20. The curriculum in the Horticulture is approved for these smaller class sizes due to the nature of the courses. Many use cutting tools,

garden equipment, and laboratory equipment including microscopes, glassware, and other delicate equipment that requires more supervision especially when working outdoors.

Weekly student contact hours in the Horticulture department average 331, this number is low compared to programs with large classrooms, online classes, etc. but again is similar to other vocational programs on campus that I use as a comparison.

The reduced class offerings and enrollments in AY 20/21 similarly impacted the FTEF to 3.6 from a high of 6.1 in AY 17/18

2. If your department plans to request hiring a full-time faculty member, this is the place to make the argument. Please discuss hiring needs in reference to data analyzed in sections 3.1 to 3.4. While the current numbers do not justify the need for an additional horticulture instructor, one member of the department with the 50% teaching load will retire at the end of the AY 24/25. At that time it should be determined whether to maintain the status quo of a 50% position, or increase the position to 100% Horticulture. This will certainly depend on future trends in enrollments in the Horticulture program.

3.5 Covid-19

Using the data provided by the OIE, briefly describe how the Covid-19 pandemic affected your department and how your department has adjusted. Did you make temporary changes? Or have you adopted new, long-lasting practices that enhance teaching?

I think we can all agree that the Spring semester of 2020 was very difficult. The horticulture classes that semester were taught almost entirely by adjunct faculty members. All of the classes had laboratory components, or were very in person oriented. We were all expected to learn Zoom, and how to convert our exams and all course content into Canvas over the weekend. It was a stressful time for both the students and faculty. We were certainly more forgiving and flexible regarding assignments, including accepting late work without penalty, allowing make-ups for missed exams, the posting of recorded zoom lectures for students who may have missed class were also provided. While we did our best to provide students with the experiences they were accustomed to the first 8 weeks of the semester, it was impossible to deliver a similar experience remotely. After consulting with the faculty and our dean we decided that we would not offer labs remotely. A proposal was written and given to the VPI and approved so we could offer the labs in person at ½ capacity, and continue to teach the lectures via Zoom. This had a negative impact on almost all metrics provided by the OIE. Enrollments, course offerings degrees awarded all showed significant declines. We did however see an increase in student success, including a significant increase in the success rate of our Latinx students of roughly 10%. This seems to indicate that policies adopted during Covid have been beneficial to the students.

I think we as instructors realize the benefits of using Canvas for delivering course content, communicating with students, real time grade information, testing flexibility etc. I believe that this is the silver lining of the pandemic. It forced us to use features of Canvas that we normally may not have used, and now it just seems natural and we will continue to use many of these features when we resume in person instruction.

3.6 What has not been asked?

Please tell us about other ways your department has been successful, ways that the previous questions might have missed.

4.0 Outcomes

4.1 Program Student Learning Outcomes (PSLOs)

Since the last self-studies, the College adopted new Institutional Student Learning Outcomes ([ISLOs](#)) and new design principles for PSLOs. Please describe your department's PSLO revisions to date, and your PSLO plans.

The Horticulture department has not revised any of the PSLO's to date. Hopefully we will be able to attend future workshops, and or work with our division rep to address these short comings.

4.2 PSLO Assessment

The new PSLO [design principles](#) encourage departments to use PSLOs as a way of gauging student learning once they have completed a degree or certificate, not just when they have completed a single course. Please describe how PSLOs are assessed or will be assessed in your department.

At this time, I am not sure how PSLO's could be assessed. We often don't know which students are, or have applied for a degree or certificate. We would have to do a better job at identifying those students. Many of our classes do have final projects, these could potentially be submitted into an e portfolio. How and where these would be submitted and stored, how they would be assessed would need to be answered.

There are many other programs in our division, so a dialog about this in a division meeting would be helpful. Procedures from programs further along in the PSLO assessment could be modified to meet the needs of the Horticulture department

4.3 CSLO Assessment

Briefly describe the timeline your department uses to assess CSLOs on a regular basis and how you use the results to make improvements. This discussion should be based on SLO data, which is available on eLumen. (Your division's SLO reps can help with this.) Please include relevant CSLO charts or graphs in an Appendix. Since the last self-study, you should have assessed the CSLOs of every course that you have taught, at least once. If that is not the case, please describe how you will accomplish this as soon as possible.

As the sole full time faculty member in the Horticulture department my main focus for the past 3 years has been on keeping the department viable and running. The last year was just trying to get up to speed on Canvas as we dealt with Covid. As the department coordinator I made a decision that the adjunct faculty would assess the CSLO's and I would input them into elumen. Unfortunately this has been a recipe for disaster. For the most part, the adjuncts cooperated with my request, I did a poor job of inputting CSLO data into elumen, most of the input was from my own classes, sometimes some adjunct taught courses would be input. I do have both hard copies and electronic data that has not been input

from past semesters. Moving forward, I will seek training from our division CSLO coordinator for the adjunct faculty and for our new full time faculty member. Hopefully this will improve the data gathering and especially data input that has been lacking the last several years. We will assess all CSLO's for all courses taught, since many classes are taught on an infrequent basis.

Discussing results of CSLO's that have been assessed is another issue for a small department with adjunct faculty teaching most of the courses each semester. It is hard to have meaningful discussion with instructors that you don't see on a regular basis. I have made changes to the way that I have taught certain topics in classes based on CSLO results. It is difficult to discuss data when a class is offered every 2 or 3 years which has been the case for many classes since AY 17/18 (See appendix A data)

Now that we are all adept at Zoom, it will much easier to meet with the adjunct faculty to discuss data and look for methods to improve the success of the outcomes.

4.4 SLO Equity Analysis

1. Looking at CSLO attainment data, do you find significant differences by race, ethnicity, gender, and other categories? Please include some illustrations of this data in the Appendix. Describe here what the data shows. What strategies will you use to close the attainment gaps among groups of students? What kinds of professional learning would help?

The data provided by our CSLO coordinator suggests a similar trend in students meeting the CSLO expectations and course success rates rate in the Latinx student group. Meaning there is a gap that is present. Out of all the CSLO's assessed, the percentage CSLO's meeting or exceeding expectation is 84% overall. The meeting or exceeding expectation rate for Latinx students was 79%. If we look into this in detail, the total number of CSLO's that did not meet expectation was 125 for Latinx students. 43 of the 125 or 34% were from Hort 152 Applied Botany. Many of the students in this class are not Horticulture students, as this class is populated with many students meeting their general education requirements. If we remove these data from the total, the disparity is even less, and possibly insignificant for horticulture majors. Yes there is still an equity issue, but maybe this difference can be addressed more effectively by focusing more on the one class that has the most cslo's "does not meet expectations" results. As a relatively small program, I do have a bias towards students that I consider Horticulture majors, I want them to be successful.

The 79% of Latinx students that "meets or exceeds expectations" on CSLO's is better than the 67% success rate for Latinx students in our classes. Most CSLO assessments are given on a final exam, and or a final project. Increasing student success in class, would most likely translate into improved outcomes on CSLO's.

2. Compare the equity analysis in this section to the equity analysis in Section 3.2. Are there some groups who have lower completion and success rates AND lower SLO attainment rates than other groups? Can new departmental strategies close both gaps? Please explain. [For example, many departments found that their SLO attainment gaps are quite a bit smaller than their success gaps (or the gaps don't exist). This might mean that many students who get a D or

lower in a course are actually learning the material (i.e. attaining the SLOs) but they are winding up with a failing grade for other reasons: absences, tardies, missed assignments, missed exams, poor performance on high-stakes assignments.]

The data seems to indicate that even though the Latinx students are not as successful in our classes 67%, they are still learning based on the CSLO data of “meets or exceeds expectations” at 79%. A more detailed analysis would have to be conducted at the time of grade input to determine the exact reasons why a student would meet CSLO expectations, but not be successful in the class. Many CSLO’s are determined by a final project and not on a final exam. Students who under perform on exams, may do well on projects, therefore having a greater likelihood of meeting the expectations of the CSLO’s. If this is the case, looking at alternate ways to evaluate students might be helpful. Other methods could include some of the procedures that have been implemented during this last year that has increased the success rate in the Latinx students from 66.7% in AY 19/20 to 77.3% in AY 20/21

5.0 Other Areas of Program Effectiveness

5.1 Your Department and General Education

1. Using the data provided by the OIE, please look at students who take your courses for GE credit.
2. What role does your department play in helping students complete the GE pathway?

The Horticulture department has 3 course offerings that meet the GE requirements for CSU life science with a lab. These classes are Hort 152 Applied Botany which is out most offered class with at least 2 sections offered /semester. Applied Entomology Hort 205, and Plant Pathology Hort 207. The latter 2 courses are part of the required courses in one of our certificates in Integrated Pest Management, and are offered at most once every 2 years.

Applied Botany was taught very infrequently 10 years ago. As demand for a life science with a lab increased to a point where students did not have access to Biology 101.or 102 we started to offer Hort 152 as a substitute, and have been doing so ever since. Ge enrollments make up 35% of our offerings.

3. Do you offer GE courses at a variety of time slots and at a frequency that allows students to fulfill GE requirements?

We offer both day and evening sections of Applied Botany, Hort 152. Both Hort 205 and 207 are offered in the evening, but less frequently. We do not offer any of these classes online.

4. Please take into account daytime, evening, weekend, and online classes to provide a brief sketch of your GE course availability.

While Applied Entomology (Hort 205) and Plant Pathology (Hort207) both meet the GE requirements for CSU, they are not your normal GE classes. While there is no prerequisite for these classes, as the instructor for both, I strongly recommend to students taking these courses to fulfill their GE requirements to consider other alternatives. These courses both transfer to Cal Poly Pomona and are taught at a high level. The success rate for Hort 207 is 53%, and 58% for Hort 205.

The withdrawal rate is also high for these courses, Hort 205 is 20% and Hort 207 is 23.5%. For these reasons I don't think that these courses are meeting the needs of GE students.

5.2 Outside Influences on Your Department

1. Describe any laws, regulations, trends, policies, procedures, or other influences that have an impact on your program. Please include any other data that may be relevant to student achievement, learning, and trends within your Basic Skills, CTE, or Transfer Education programs. The Horticulture department has experienced a decline in enrollments since our high in AY 17/18. Normally vocational programs experience declines in enrollments when the economy is doing well, and jobs are plentiful. This was certainly the case until the spring of 2020 when Covid hit and the economy shut down. Another contributing factor and was the sudden resignation of a faculty member. This had a direct impact on course offerings, fewer courses offered may have turned some students off from the program. The data does show a decline in unduplicated students from AY 17/18 from 236 to 193 in AY 18/19. It seems that 43 students dropping out of the program due to an instructor resignation is extremely high, so I am assuming that outside factors were at play as well as mentioned above. During our peak year in enrollment AY17/18, many students were anticipating the legalization of Cannabis, and were taking our Hort 155 Hydroponics/Aquaponics to learn indoor growing techniques that could be applied to this industry, Cannabis is the 5th largest revenue crop grown in California.

The impact of Covid on the program has been discussed in section 3.5

The other major factor that has had an impact on the program is drought. The recent drought has influenced the landscape of the typical California home. Cities were giving incentives to remove lawns and penalties for not reducing water use. This has opened up other opportunities for the department. We teach water conservation, collection and other sustainable methods of growing plants in the permaculture class. We have been preaching the benefits of using drought tolerant plants in the landscape for years, and are selling more and more of them at our plant sales. Searching for new drought tolerant plants is constantly occurring in the department. While this past year and a half has been all about Covid, the drought has been pretty much forgotten, the most recent information from the U.S. Drought Monitor indicates that much of California is either in D3 Extreme drought or D4 Exceptional drought. D4 includes most of our farmland in the Central Valley. <https://droughtmonitor.unl.edu/CurrentMap/StateDroughtMonitor.aspx?CA>

Next semester we are offering a full complement of courses all in person so it will be interesting to see if our enrollments increase. As of this writing I am concerned about what effect the vaccine mandate will have on our department/programs. Many of our horticulture students are deeply concerned about the food that they eat, what it has been treated with, and are interested in growing their own food and are taking courses to learn these skills. Many students are very concerned about what goes into their body, these concerns may translate into similar concerns about the vaccine, if this is true we may see a decline in enrollments.

2. Make sure you are including all degree and certificate programs, including the College's GE program.

3. Please also consider not only your courses, but also prerequisite and corequisite courses that might be offered by a different department.

We do not have any prerequisite, or corequisites courses outside the department

4. If AB 705 applies to the program then how are you meeting its mandates?

We have not been affected by AB705

5.3 Your Program's Active and Applied Learning and High-Impact Practices

1. The College wants to create an inventory of faculty efforts to make learning active and applied. Please briefly describe opportunities your students have to apply and deepen knowledge and skills through projects, internships, co-ops, clinical placements, group projects outside of class, service learning, study abroad, and other experiential learning activities that you intentionally embed in coursework, or elsewhere in your program.

As a vocational program, students are always expected to participate in classroom activities that reinforce the topics taught on lecture. Almost all of our classes have a laboratory component associated with a lecture. It is in these labs where students learn and practice the skills to become proficient. Many of our classes also have a final project where students apply and incorporate these skills. The projects include collections in Applied Entomology. Design projects in Landscape Design, irrigation design, Permaculture design, and Landscaping for Dry Climates. Students create plant identification notebooks for all of our plant I.D. classes. Students plant, grow and harvest vegetables in our vegetable garden as part of our Principles of Horticulture classes. Students repair, maintain, install and upgrade our extensive irrigation system as part of our irrigation classes. Our facility is extensive and in constant need of attention. All instructors know to ask myself or our Lab Tech for projects that their classes can participate in to practice the horticultural skills that have been taught in lecture.

The Horticulture department also offers a paid internship program. Horticulture students are hired to propagate and care for plants in our nursery. Several times per year we have plant sales that generate the funds to pay the interns. When time permits the interns also assist in maintaining the landscape, grounds and structures of the Horticulture facility. We have very specific pruning criteria for the plants in the department. The grounds are our living laboratory with many unique plant specimens that are used as part of our plant identification classes. The grounds crew from M & O only mow, edge and blow leaves and other debris from the hard surfaces. An outside arborist handles the tree maintenance. While the landscape experience is good for the interns, time spent away from the plant production responsibilities, limits the plants available for sale. Reduction in revenue will cause a similar reduction in labor. (Interns)

2. Are there institutional barriers hindering your department's ability to offer or enhance these learning experiences for students? Please explain.

The main institutional barrier has been the loss of our full time groundskeeper. When I first started in the department we had our own designated groundskeeper. He was part of M & O department, but reported directly to us for what needed to be done, so the work was always well coordinated with the needs of the classes and the department as a whole. Over time, M&O reduced his time in the department until we lost him completely. M&O would do routine maintenance once per week

as a group. The art of pruning our plants became a race to finish the job. Quality was lost for quantity. Because of our desire for proper plant care, the grounds crew was relegated to mowing, edging and blowing leaves. Much of the plant care became our responsibility, which became the intern's responsibility. As mentioned above, the main source of revenue for our internship has been the plant sale money. Time away from plant production will have a negative influence on revenue, which reduces the interns' hours. We also have to deal with the minimum wage increases which we have no control over. Money will always be the main reason for not expanding these opportunities for students. There is always more interest in the program than we can afford to pay.

6.0 Planning

6.1 Progress on Previous Strategic Action Plans

1. Please briefly describe the goals (Strategic Action Plans, SAPs) from your last self-study. How much progress have you made on them? If you have reached a goal, explain how it allows ongoing improvement, especially if you received additional funding.

SAP #1 from our last program review was to create a 3-4 year plan of Horticulture course offerings so students can better plan their education path. This was not completed in any special format. With the resignation of a faculty member, our ability to consistently plan and offer courses was reduced. With the current focus on program mapping, we will wait until all programs have had the mapping process completed, then we will have a better idea on how to proceed with scheduling courses for future semesters. See SAP # 4 in this current program review.

SAP # 2 was to restore and repair the buildings in the native plant garden north of the 400 building. This was an SAP created and proposed jointly with the Biology faculty. This restoration would have been beneficial for both departments. This SAP was not funded and we have decided to forego any further pursuit of this request. If the campus has a desire to make this unused space into something useful, then we would be amenable to revisit this request, but there seems to be other plans for the use of this space

SAP# 3 was to create a groundskeeper position for the Horticulture department. This request was not funded, as a result we have pulled interns from their normal responsibilities to help maintain the landscape. There is still a need to create and fill this position, and it will be requested once again as SAP #1

SAP#4 was a request for an electric cart to move materials to and from the 400 building and horticulture. This request was not funded as part of PR. Our dean was able to secure funds from other sources and the cart has been purchased and has proven to be invaluable for many functions besides its primary request. It is used daily!

2. If additional funds were NOT allocated to you in the last review cycle, how did the LACK of funds have an impact on your program?

The lack of funding for a groundskeeper in the Horticulture department means we just kicked the can down the road. We do our best at maintaining the grounds, but it really is a full time job to do things properly, we can pull interns away from their normal duties, but they are not trained in the

proper use and application of chemicals (herbicides) for weed control. We prefer that they do not use heavy duty equipment like chain saws which are sometimes necessary, and quite frankly it shouldn't be their responsibility, we don't make the athletic teams mow their own fields.

6.2 New Strategic Action Plans

Please write brief, concrete plans that you will accomplish over the next four years. Your plans might include requests for additional funds. The Program Review Committee will read these and either endorse the request or ask for more information. Please keep in mind that the Committee's endorsement does not guarantee additional funding. The President's Advisory Council and Faculty Allocation Committee play major roles in allocating funds and prioritizing new faculty hires.

Please number each of your plans. This will help keep to track of them. Also, make sure that each funding request includes the following elements:

1. It is supported by the data and analysis in previous sections of this self-study.
2. It fulfills a part of the [College mission, vision, goals, or objectives](#).
3. It explains how the request helps the College attain student equity.
4. There is a measurable way to tell if the extra funding will be effective.
5. It considers whether you can reach this goal (or parts of it) without additional funding.
6. Please give a dollar amount, or best estimate. If you can identify a funding source, then please name it. If you can put the request into one of the following categories, please do so: Personnel, Facilities, Equipment, Supplies, Computer Hardware, Computer Software, Training, Other.

Program Review Comprehensive Self-Study

Strategic Action Plans Template

Please fill out this table for each of your Strategic Action Plans.

Strategic Action Plan (SAP) #_1_, department (or program) name: __Horticulture_____

Describe Strategic Action Plan.	<p>Groundskeeper position for the Horticulture Department</p> <p>The Horticulture department has a long history of having a dedicated groundskeeper to take care of the extensive plant material in the department.</p> <p>We propose that a groundskeeper be hired for the Horticulture department that would not be part of M&O. This gives us</p>
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	<p>greater flexibility on when and how the plant material is maintained.</p> <p>To be able to attract new students, a program has to have something to offer. We have many classes and programs to offer students. We have always had beautiful landscaping. The landscape should be an example to our students, it should stand out. The grounds are beautiful, but they have lost their luster since the loss of our groundskeeper. Many programs have a Laboratory clerk position, our laboratory is the grounds and plants of the department and are in need of continuous attention The groundskeeper position would report to the horticulture faculty and staff. The groundskeeper would be in charge of maintaining the existing plant material, trouble shooting irrigation problems. Please see the NOCCCD description for a groundskeeper in the appendix C for a complete list of duties. The groundskeeper would also assist the laboratory technician when necessary, and help in the preparations for the plant sales.</p> <p>We would like this position to be filled as soon as possible Persons responsible are Jeff Feaster, Luellen Swayzer and Ed Kim</p>
<p>List College goal/objective the plan meets.</p>	<p>Goal 1 Promote success for every student Objective 2 Enhance workforce training opportunities Objective 4 Increase completion of courses, certificate and degree programs, and transfer-readiness Objective 5 Encourage completion of degrees for students enrolled in Career Technical programs Goal 2 Cultivate a culture of equity Objective 3 Increase outreach to and recruitment of students from underserved populations Goal 3 Strengthen connections with our community Objective 1 Create and expand partnerships with local K-12 and higher education institutions Objective 2 Create and expand relationships with local businesses and civic organizations Objective 3 Be a cultural hub for the local community</p>
<p>Explain how the request helps the College attain student equity.</p>	<p>All students will have access to the grounds, and be able to observe the proper maintenance and care of a mature landscape. We also have plants from all over the world, we foster a culture of inclusivity in the plants that we select, and</p>

	Students will feel a sense of belonging as they encounter plants from their countries of origin.
What measurable outcome do you anticipate for this SAP?	Students will have access to properly pruned and maintained plant material. The grounds will serve as an example of what plants should look like for both the public and students
What specific aspects of this SAP can you accomplish without additional financial resources?	We are doing the best we can utilizing interns, and various classes, however this takes away productivity from plant sale preparation

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	\$3826-4637 /mo	
Facilities		
Equipment	We have all the equipment necessary	
Supplies		
Computer hardware		
Computer software		
Training		
Other		
TOTAL requested amount	\$45,912.00 to \$55,644.00	

Strategic Action Plan (SAP) # 2 , department (or program) name: Horticulture

Describe Strategic Action Plan.	Tree maintenance in the Horticulture department. Set aside annual funding to prune the large specimen trees in the department. The college currently contracts out all of its tree maintenance. The Horticulture department does benefit from the tree trimming, however we seem to be more of an afterthought when it comes to the routine pruning needed to maintain the trees.
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	<p>This is very important from a safety perspective as well. We would hate to have an accident in Horticulture department where someone was injured. Students would also benefit by being able to see examples of properly cared for trees.</p> <p>We propose that a budget item be created to provide funding for this proposal. If we have control over the funding we will be able to have more control over when and what gets pruned.</p>
List College goal/objective the plan meets.	<p>Goal 1 Promote success for every student Objective 2 Enhance workforce training opportunities Objective 4 Increase completion of courses, certificate and degree programs, and transfer-readiness Objective 5 Encourage completion of degrees for students enrolled in Career Technical programs Goal 2 Cultivate a culture of equity Objective 3 Increase outreach to and recruitment of students from underserved populations Goal 3 Strengthen connections with our community Objective 1 Create and expand partnerships with local K-12 and higher education institutions Objective 2 Create and expand relationships with local businesses and civic organizations Objective 3 Be a cultural hub for the local community</p>
Explain how the request helps the College attain student equity.	All students have access to the Horticulture facility
What measurable outcome do you anticipate for this SAP?	<p>Students will have access to properly pruned and maintained plant material.</p> <p>The grounds will serve as an example of what plants should look like for both the public and students</p>
What specific aspects of this SAP can you accomplish without additional financial resources?	None, the trees need special care and equipment, and expertise that we cannot supply

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		

Facilities		
Equipment		
Supplies		
Computer hardware		
Computer software		
Training		
Other		
TOTAL requested amount	\$ 20,000..00	

Strategic Action Plan (SAP) # 3, department (or program) name: Horticulture

Describe Strategic Action Plan.	<p>Orange County Farm Bureau Partnership</p> <p>We plan to continue to cultivate our relationship with the OCFB. The OCFB has been very generous to the department. We were awarded a \$ 25,000 scholarship to be used for student wages. This just so happened to offset funds that were reduced due to lost plant sales because to the pandemic. We provided the OFCB a donation of 2000 tomato plants that were given to farmers who then sold the produce at local farmers markets</p> <p>This relationship might lead to internships, fieldtrips for our classes, and give our department more exposure. This will also give more access to the local high schools, those with Agriculture programs participate with the OCFB</p>
List College goal/objective the plan meets.	<p>GOAL 1: Promote success for every student</p> <p>Objective 2 Enhance workforce training opportunities</p> <p>Objective 5: Encourage completion of degrees for students enrolled in Career Technical programs</p> <p>Goal 2 Create a culture of equity</p> <p>Objective 1: Remove institutional barriers to student equity and success</p> <p>Objective 3: Increase outreach to and recruitment of students from underserved populations</p> <p>Goal 3 Strengthen connections within our community</p> <p>Objective 1 Create and expand partnerships with local K-12 and higher education institutions</p> <p>Objective 2: Create and expand relationships with local businesses and civic organizations</p> <p>Goal 4 Commit to accountability and continuous quality</p>

	improvement Objective 2: Ensure financial, physical, and technological resources are available to maintain necessary services and programs Objective 3: Provide professional and career development opportunities for students, faculty and staff
Explain how the request helps the College attain student equity.	All students will benefit from funds provided by OCFB and career opportunities
What measurable outcome do you anticipate for this SAP?	Increased awareness of the department, additional opportunities for students
What specific aspects of this SAP can you accomplish without additional financial resources?	No funds are being requested

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		
Facilities		
Equipment		
Supplies		
Computer hardware		
Computer software		
Training		
Other		
TOTAL requested amount	\$0.00	

Strategic Action Plan (SAP) #_4_, department (or program) name: _Horticulture_____

Describe Strategic Action Plan.	Program Mapping In order to better meet our students needs we will strive to complete program mapping in the Horticulture
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	department. We currently have only 1 program mapped. We realize that without mapping, it is difficult for students to plan out their educational goals. As instructors we also need a better plan, this allows for the purchase of equipment and other materials, to search for adjunct faculty who have the skill set to teach a subject. This will also help students earn certificates and degrees, as more funding will be tied to these awards
List College goal/objective the plan meets.	GOAL 1: Promote success for every student Objective 4: Increase completion of courses, certificate and degree programs, and transfer-readiness Objective 5: Encourage completion of degrees for students enrolled in Career Technical programs Goal 2 Cultivate a culture of equity Objective 1: Remove institutional barriers to student equity and success Goal 4 Commit to accountability and continuous quality improvement Objective 1: Promote transparency in the shared governance structure and decision-making processes
Explain how the request helps the College attain student equity.	All students will have access to the program mapping
What measurable outcome do you anticipate for this SAP?	Increased degrees and certificates awarded Completion of awards more expeditiously
What specific aspects of this SAP can you accomplish without additional financial resources?	No funds are requested

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		
Facilities		
Equipment		
Supplies		

Computer hardware		
Computer software		
Training		
Other		
TOTAL requested amount	\$0.00	

Strategic Action Plan (SAP) # __5, department (or program) name: __Horticulture__

Describe Strategic Action Plan.	PSLO design, CSLO collection and input The plan is to complete the PSLO design and mapping for our programs, and to continually assess the CSLO’s for all courses offered during the semester
List College goal/objective the plan meets.	GOAL 1: Promote success for every student Objective 4: Increase completion of courses, certificate and degree programs, and transfer-readiness Objective 5: Encourage completion of degrees for students enrolled in Career Technical programs Goal 2 Cultivate a culture of equity Objective 1: Remove institutional barriers to student equity and success Goal 4 Commit to accountability and continuous quality improvement Objective 1: Promote transparency in the shared governance structure and decision-making processes Objective 3: Provide professional and career development opportunities for students, faculty and staff
Explain how the request helps the College attain student equity.	We will be able to determine to determine any equity gaps in the CSLO data, and address in a timely manner
What measurable outcome do you anticipate for this SAP?	Completion of this SAP will assist in the accreditation process
What specific aspects of this SAP can you accomplish without additional financial resources?	No funding necessary, additional training for both full time and adjunct 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		
Facilities		
Equipment		
Supplies		
Computer hardware		
Computer software		
Training		
Other		
TOTAL requested amount	\$0.00	

Strategic Action Plan (SAP) #_6 department (or program) name: __Horticulture_____

Describe Strategic Action Plan.	<p>Upgrade models, posters, microscope slides We currently are using outdated/broken models, and old faded microscope slides for many of our classes. Posters depicting the life cycles of plants, fruit types, double fertilization, mitosis/meiosis would also be helpful. Videos of complex processes like photosynthesis would also be useful. We have need for many of these in applied botany, applied entomology, plant pathology</p>
List College goal/objective the plan meets.	<p>GOAL 1: PROMOTE SUCCESS FOR EVERY STUDENT Objective 2: Enhance workforce training opportunities Objective 3: Improve student critical thinking skills Objective 4: Increase completion of courses, certificate and degree programs, and transfer-readiness GOAL 2: CULTIVATE A CULTURE OF EQUITY Objective 1: Remove institutional barriers to student equity and success Objective 4: Foster a sense of belonging where all are welcome and student basic needs are addressed</p>

	<p>GOAL 4: COMMIT TO ACCOUNTABILITY AND CONTINUOUS QUALITY IMPROVEMENT</p> <p>Objective 2: Ensure financial, physical, and technological resources are available to maintain necessary services and programs</p>
Explain how the request helps the College attain student equity.	<p>Promotes high impact practices in courses with equity gaps</p> <p>Supports hands-on classroom activities and skill assessment in Horticulture courses</p> <p>Increases student interest and engagement in laboratory activities</p>
What measurable outcome do you anticipate for this SAP?	<p>Improve student success and retention</p> <p>Improve course completion</p>
What specific aspects of this SAP can you accomplish without additional financial resources?	<p>This plan is dependent on funding</p>

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		
Facilities		
Equipment		
Supplies	\$15,000	Lottery Money and General Fund
Computer hardware		
Computer software		
Training		
Other		
TOTAL requested amount	\$15,000.00	

6.3 Optional: Long-Term Plans

Your department might have more plans than just immediate requests for funding. If so, please describe them here.

The long term plans for the program are to make sure the Horticulture department gets the upgrades that it has been promised.(Measure J, or other state funds) We have proposed not just a new horticulture classroom and office building, but a STEM center that would house the vocational programs of the Natural Sciences department. The 400 building has reached its capacity in its ability to grow, it has also exceeded its ability to provide office space. This new facility would alleviate some of these issues, and give the new Biotech a chance to increase, and a place to house its equipment, this will require much planning and discussion. From the perspective of the horticulture program we will need to be intimately involved (BUG Group) in everything. We are concerned about preserving as much of the current landscape and infrastructure as possible, and disrupting the program, plant sales, and internship as little as possible.

7.0 Executive Summary

Please provide the reader with a brief overview of the highlights, themes, and key elements of this self-study. Please don't include new information you did not discuss earlier. Although you will likely write this section last, please remember to put this summary at the front of your report. **See page 2**

8.0 Publication Review

The College wants to maintain integrity in all representations of its mission, programs, and services. Please help this effort by reviewing your publications: professional social media profiles, websites, brochures, pamphlets, etc. Please tell us the date they were last reviewed and if you found them to be accurate in all representations of the College and program missions and services. Information on the college's graphic standards is available [here](#).

1. For each of your program's publications, please provide the URL where the publication can be viewed. If the publication cannot be accessed via the Internet, please contact Lisa McPheron, Director of Campus Communications at lmcpheron@fullcoll.edu.
 - a. Horticulture.fullcoll.edu
 - b. Instagram (fullcollhort)
 - c. Facebook (Fullerton College Horticulture Department)
2. If you find an inaccurate publication, please explain how you will make corrections.
 - a. Either edit to fit the standards of school guidelines or delete publication

3. If your department maintains a social media presence then please describe it here. What do you use it for? How do you monitor it? Who is in charge of it? In what ways is it benefiting the College and your program? Does it follow the [District's social media guidelines](#)?
 - a. We use social media platforms like Facebook and Instagram to advertise our plants sales and classes. Also, we post informational material on plants
 - b. Ed Kim, the horticulture lab tech, is charge of the social media content for Horticulture.
 - c. Our social media presence attracts students and members of the community to come to our sales and to take classes.
 - d. Yes, it follows the District's social media guidelines.

4. If your program regularly communicates with the wider community, please describe how. What feedback do you get from the community?
 - a. We send out flyers and email blasts to the people who signed up to be notified of upcoming plant sales.

Format notes

Cover Page: standardize for each self-study, with signatures

Executive Summary: on a separate page, all by itself, for ease of processing.

Main body of the report

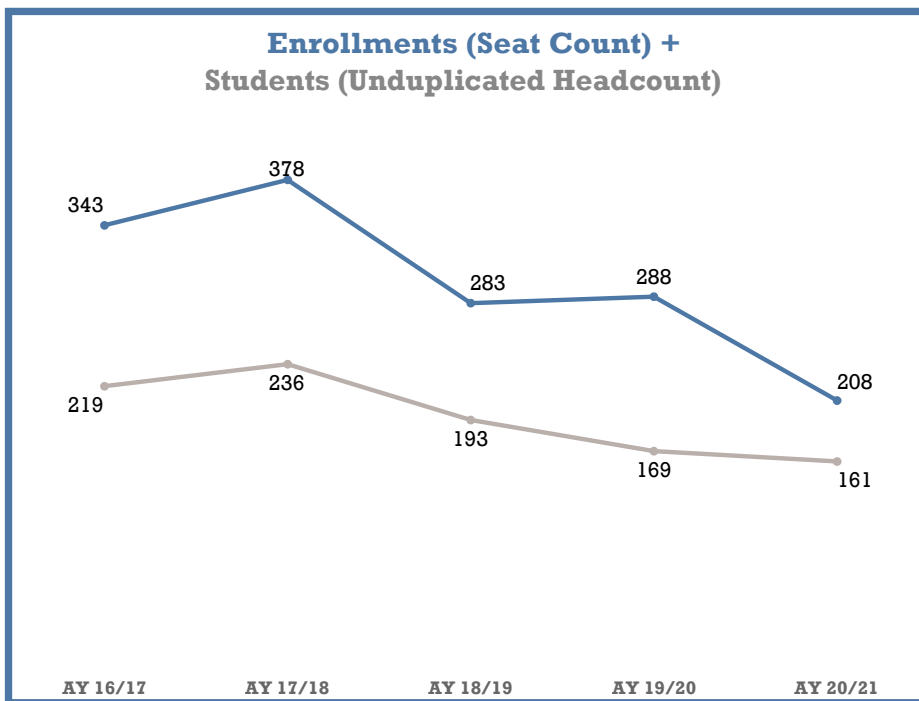
Appendix A: Key Performance Indicator (KPI) data

The Office of Institutional Effectiveness will provide data for departments to analyze. To answer some of the questions on this form, departments will need disaggregated data that focuses on specific groups. The data will be presented to identify equity gaps among groups, so that departments can plan ways to close those gaps. Departments should also be informed how their student populations compare to the overall college population, and the population of the college's service area.

APPENDIX A
Fall 2021 Instructional Program Review

Horticulture

SECTION 3.1.1: Enrollment Demographics: Using the data provided by the OIE, briefly describe the enrollment trends in your program over the past five years.



The "Enrollments and Students" graph to the left shows the number of **enrollments (seat count)** and the number of **unique students (headcount)** enrolling each academic year in the **Horticulture** program.

5-Year Change Calculation

The following table calculates the % change in **enrollments** and **headcount** between AY 16/17 and AY 20/21.

Note the table shows the change for "**This Program**" as well as the change for all other programs combined at the College.

5-Year % Change in Enrollments	All Other Programs	-11.8%
	This Program	-39.4%
% Change in Headcount	All Other Programs	-11.7%
	This Program	-26.5%

1-Year Change Calculation

The following table calculates the % change in **enrollments** and **headcount** between AY 19/20 and AY 20/21.

Note the table shows the change for "**This Program**" as well as the change for all other programs combined at the College.

% Change in Enrollments	All Other Programs	-3.5%
	This Program	-27.8%
% Change in Headcount	All Other Programs	-3.3%
	This Program	-4.7%

SECTION 3.1.1: Using the data provided by the OIE, briefly describe the enrollment trends in your program over the past five years.

Enrollments (Seat Count) by Course for: Horticulture

1 Year Comparison	5 Year Comparison
AY 19/20 v. AY 20/21	AY 16/17 v. AY 20/21

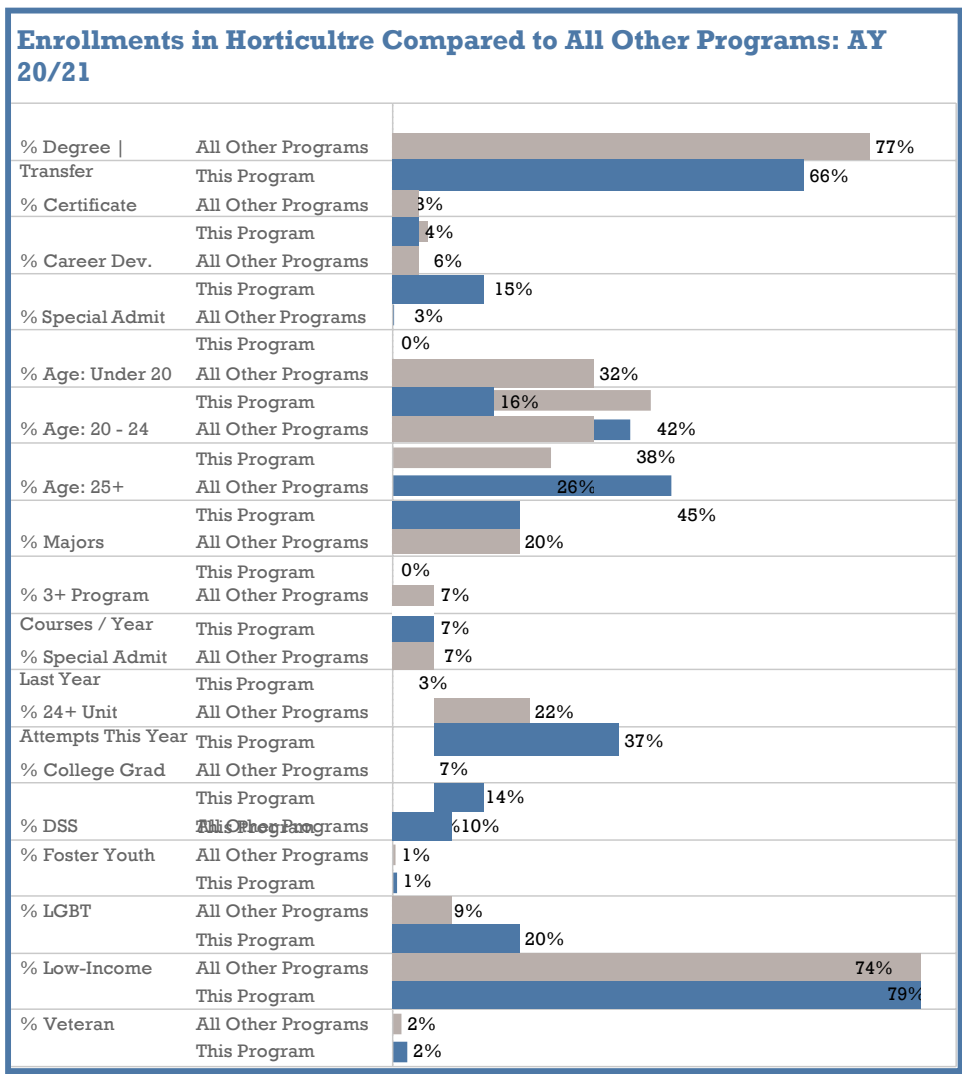
Note: This page(s) is for any program that would like to add commentary on course-level enrollment trends for Section 3.1.1. This table shows course-specific enrollments from AY 16/17, AY 19/20, and AY 20/21. If additional data are needed, please consult FC's KPI Dashboard or connect with OIE.

Course	AY 16/17	AY 17/18	AY 18/19	AY 19/20	AY 20/21	AY 20/21	AY 20/21
HORT 001 F	24	22	24	21	22	5%	-8%
HORT 002 F	23	24	16	11	12	9%	-48%
HORT 008AF		12					
HORT 010AF				11		-100%	
HORT 010BF	12						-100%
HORT 045 F		16					
HORT 152 F	99	95	105	82	97	18%	-2%
HORT 153 F		23	16		13		
HORT 154 F		5		4		-100%	
HORT 155 F	25		23				-100%
HORT 156 F				26		-100%	
HORT 157 F	8						-100%
HORT 160 F		25	26	29	19	-34%	
HORT 161 F	19	22		28	9	-68%	-53%
HORT 162 F		12					
HORT 164 F			19				
HORT 165 F		20		11		-100%	
HORT 173 F		20		18		-100%	
HORT 174 F		24	16	19	14	-26%	
HORT 188 F	18						-100%
HORT 200 F	14	15	18	15		-100%	-100%
HORT 201 F	3	3	3				-100%
HORT 205 F		18		13		-100%	
HORT 207 F			17				
HORT 250 F	49	22			22		-55%
HORT 255 F	49						-100%
Grand Total	343	378	283	288	208	-28%	-39%

The number of different courses offered by the Horticulture Program over the last 5 years:

26

SECTION 3.1.2: Using the data provided by the OIE, describe the student population your department serves. Do you have a way of determining which students are your majors, for example through a gateway course? Please explain...



**AY 20/21
Enrollments
(Seat Count) for
"This Program"
Horticulture**

208

**AY 20/21
Enrollments
(Seat Count) for
"All Other
Programs"**

129,775

Horticulture Enrollments by Race | Ethnicity | Ancestry

	All Other Prog..	This Program
Amer. Indian Alaska N..	0.2%	
Asian	11.2%	9.6%
Black African Amer.	2.9%	1.4%
Filipino	2.7%	1.4%
Latinx	57.7%	46.6%
Native Hawaiian Pacifi..	0.2%	
Two or More	3.4%	5.8%
Unknown	5.6%	9.6%
White	16.0%	25.5%

Horticulture Enrollments by Gender

	All Other Programs	This Program
Female	53.0%	47.1%
Male	42.5%	42.3%
Different Ident..	4.6%	10.6%

SECTION 3.1.2: Using the data provided by the OIE, describe the student population your department serves. Do you have a way of determining which students are your majors, for example through a gateway course? Please explain...

**AY 20/21
Enrollments in
Horticulture courses
for Majors**

**AY 20/21
Enrollments in
Horticulture courses
for Non-Majors**

208

Category	Non-Majors	Percentage
% Degree Transfer	Non-Majors	66%
% Certificate	Non-Majors	4%
% Career Dev.	Non-Majors	15%
% Special Admit	Non-Majors	0%
% Age: Under 20	Non-Majors	16%
% Age: 20 - 24	Non-Majors	38%
% Age: 25+	Non-Majors	45%
% Majors	Non-Majors	0%
% 3+ Program Courses / Year	Non-Majors	7%
% Special Admit Last Year	Non-Majors	3%
% 24+ Unit Attempts This Year	Non-Majors	37%
% College Grad	Non-Majors	14%
% DSS	Non-Majors	10%
% Foster Youth	Non-Majors	1%
% LGBT	Non-Majors	20%
% Low-Income	Non-Majors	79%
% Veteran	Non-Majors	2%

Race Ethnicity Ancestry	Non-Majors
Asian	9.6%
Black African Amer.	
Filipino	
Latinx	46.6%
Two or More	5.8%
Unknown	9.6%
White	25.5%

Gender	Non-Majors
Female	47.1%
Male	42.3%
Non-Binary	
Unknown	6.7%

SECTION 3.1.3: Which classes have the highest demand and why? Are they offered regularly -- at different times of the day and week, in different formats (in-person, online, hybrid)? Please explain.

SECTION 3.1.5: Does enrollment vary by semester? Please describe how course offerings are adjusted to meet student demand and help students reach their academic goals.

5 Courses with Most Enrollments (5 Year Totals)				
Course	Enrollments	Sections	% Online	% Evening
HORT 152 F	478	23	0%	20%
HORT 001 F	113	5	0%	0%
HORT 160 F	99	4	0%	100%
HORT 250 F	93	4	0%	0%
HORT 002 F	86	5	0%	31%

Average* Number of Sections Offered and Enrollment by Semester <i>*(5-Year Avg.)</i>		
	Avg. Sections	Avg. Enrollments
Fall	7	151
Spring	9	149

Number of Summer, Fall, and Spring Terms, respectively, a course has been offered in the last 5 years.

(5 = Course has been offered every Fall term in the last 5 years; 4 = Course has been offered 4 of the last 5 fall semesters, etc.)

Course	Fall	Spring
HORT 001 F	5	
HORT 002 F		5
HORT 008AF		1
HORT 010AF	1	
HORT 010BF		1
HORT 045 F	1	
HORT 152 F	5	5
HORT 153 F	1	2
HORT 154 F	1	1
HORT 155 F	2	
HORT 156 F		1
HORT 157 F		1
HORT 160 F	4	
HORT 161 F	1	3
HORT 162 F		1
HORT 164 F		1
HORT 165 F		2
HORT 173 F	2	
HORT 174 F	2	2
HORT 188 F		1
HORT 200 F		4
HORT 201 F		3
HORT 205 F		2
HORT 207 F		1
HORT 250 F	2	2

Number of Summer, Fall, and Spring Terms, respectively, a course has been offered in the last 5 years.

(5 = Course has been offered every Fall term in the last 5 years; 4 = Course has been offered 4 of the last 5 fall semesters, etc.)

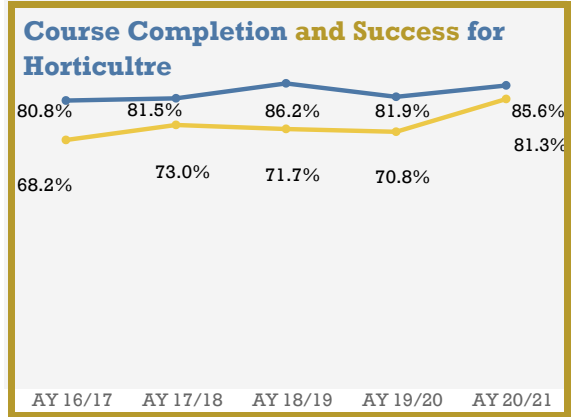
Course	Fall	Spring
HORT 255 F	1	1

Course Completion + Course Success

Section 3.2.1: Using the data provided by the OIE, briefly describe student achievement rates in your program over the past five years: **completion**, **success**, degrees/certificates, transfer, licensing, job placement, wage improvements (not all of these measures apply to every program).

Course Completion and Success for Horticulture

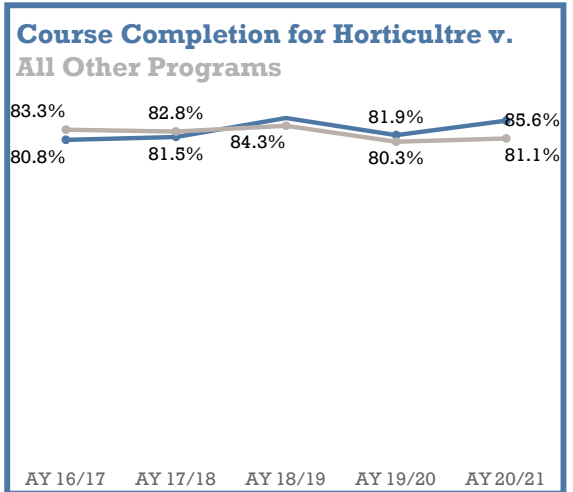
	AY 16/17	AY 17/18	AY 18/19	AY 19/20	AY 20/21
Course Completion	80.8%	81.5%	86.2%	81.9%	85.6%
Course Success	68.2%	73.0%	71.7%	70.8%	81.3%



Course Completion and Success for Horticulture Relative to All Other Programs

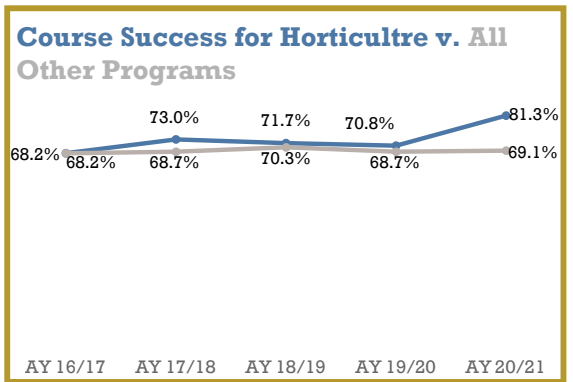
Course Completion for Horticulture

	AY 16/17	AY 17/18	AY 18/19	AY 19/20	AY 20/21
Program Match	16/17	17/18	18/19	19/20	20/21
All Other Progra..	83.3%	82.8%	84.3%	80.3%	81.1%
This Program	80.8%	81.5%	86.2%	81.9%	85.6%



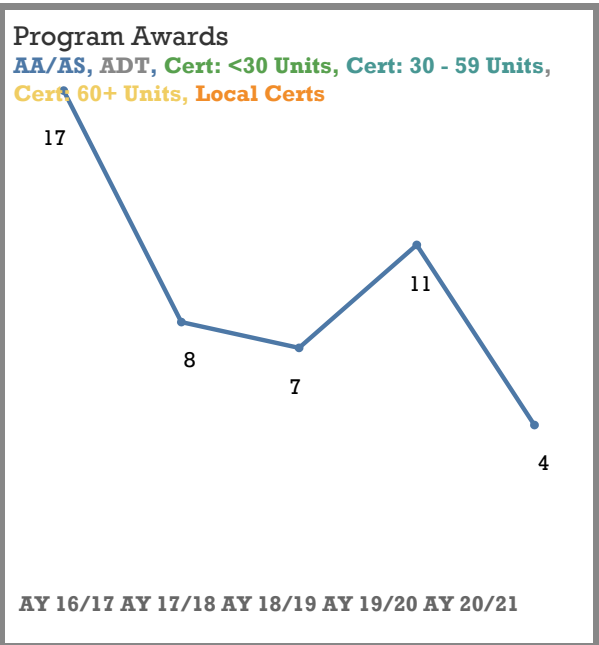
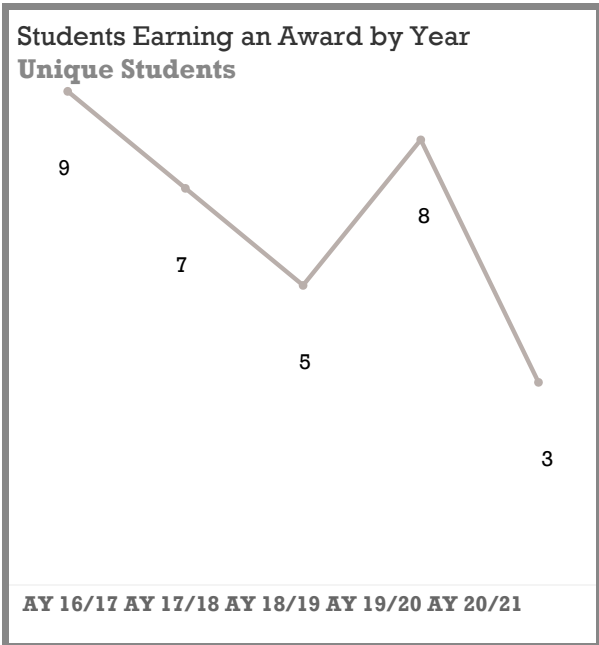
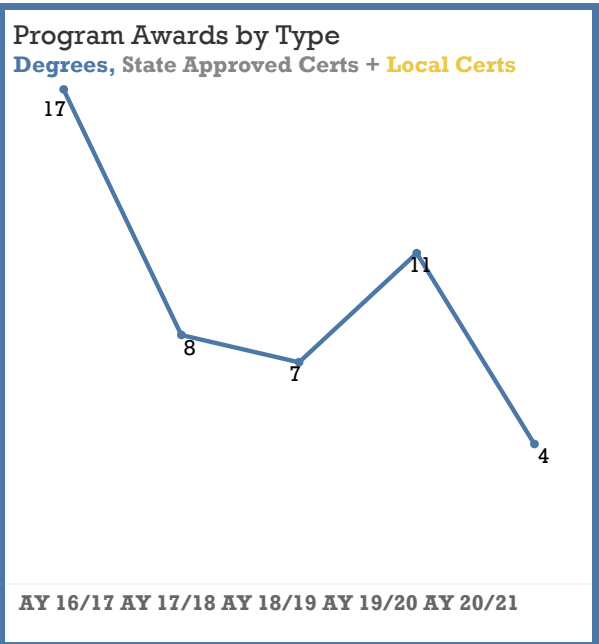
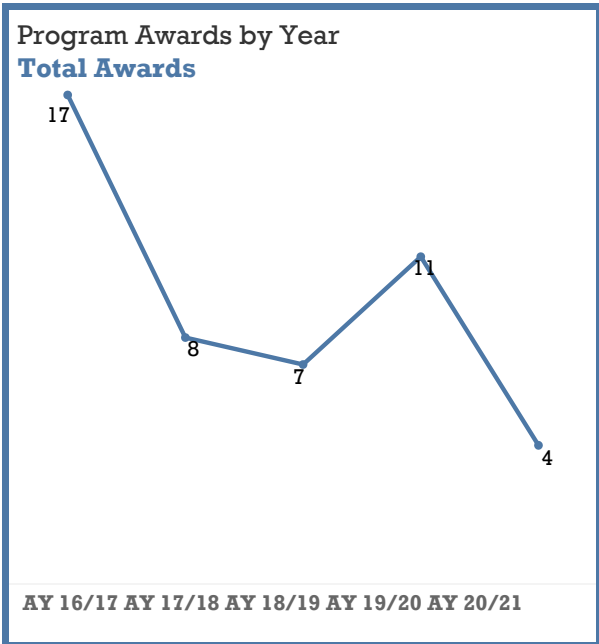
Course Success for Horticulture

	AY 16/17	AY 17/18	AY 18/19	AY 19/20	AY 20/21
Program Match	16/17	17/18	18/19	19/20	20/21
All Other Progra..	68.2%	68.7%	70.3%	68.7%	69.1%
This Program	68.2%	73.0%	71.7%	70.8%	81.3%



Section 3.2.1: Using the data provided by the OIE, briefly describe student achievement rates in your program over the past five years: completion, success, **degrees/certificates**, transfer, licensing, job placement, wage improvements (not all of these measures apply to every program).

<p># of Unique Students Earning a Program Award in Last 5 Years in Horticulture</p> <p>30</p>	<p># of Unique Students Earning a Program Award by Type in Last 5 Years in Horticulture</p> <p>Associate</p> <p>30</p>
--	---



Section 3.2.1: Using the data provided by the OIE, briefly describe student achievement rates in your program over the past five years: completion, success, **degrees/certificates**, transfer, licensing, job placement, wage improvements (not all of these measures apply to every program).

# of Unique Students Earning a Program Award in Last 5 Years in Horticulture	Total Program Award in Last 5 Years in Horticulture
30	47

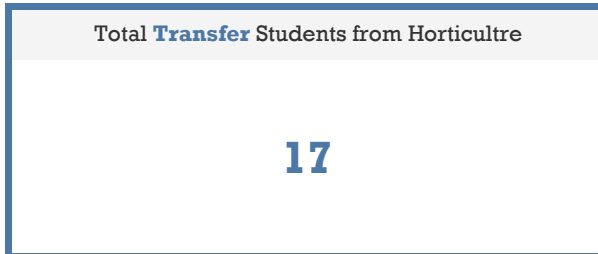
# of Students Earning a Program Award by Award Type						
	Year					Grand Total
	AY 16/17	AY 17/18	AY 18/19	AY 19/20	AY 20/21	
Associate	9	7	5	8	3	30
Total: Unique Students	9	7	5	8	3	30

Program Award Details for Horticulture Unique Students by Award Type by Year						
	Year					Grand Total
	AY 16/17	AY 17/18	AY 18/19	AY 19/20	AY 20/21	
AA	6	5	4	4	1	20
AS	8	3	3	6	2	21
Unique Students	9	7	5	8	3	30

Program Award Details for Horticulture Total Specific Awards by Year							
		Year					Grand
		AY 16/17	AY 17/18	AY 18/19	AY 19/20	AY 20/21	
	AA Industrial Technology	2A13207		2			2
AA	AA Horticulture-Nursery Mgmt	2A03816	6	3	4	4	17
	AS Horticulture-Ornamental	2S10606	3	1		2	6
AS	AS Horticulture-Landscape Mgmt	2S03817	8	2	3	5	18
Total Awards			17	8	7	11	43

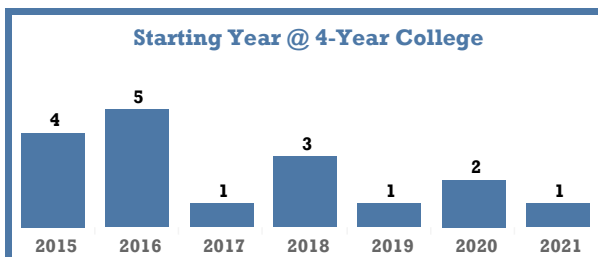
Transfer

Section 3.2.1: Using the data provided by the OIE, briefly describe student achievement rates in your program over the past five years: completion, success, degrees/certificates, **transfer**, licensing, job placement, wage improvements (not all of these measures apply to every program).



Transfers by **Award Earners or Majors**

Degree / Cert.	17
----------------	----



Transfer by Destination

CSU	12
UC	3
Other	2

Transfer by Race | Ethnicity | Ancestry

	Transfers	%
Latinx	10	59%
Unknown	2	12%
White	5	29%

Transfer by Destination by Award Earner or Major

	Degree / Cert.
CSU	12
UC	3
Other	2
Total	17

Most Popular 4-Year College Destination (Top 7)

CALIFORNIA STATE POLYTECHNIC UNIVERSITY POMONA	8
CALIFORNIA STATE UNIVERSITY - FULLERTON	2
UNIVERSITY OF CALIFORNIA-LOS ANGELES	1
UNIVERSITY OF CALIFORNIA-DAVIS	1
UNIVERSITY OF CALIFORNIA - RIVERSIDE	1
ROSEMAN UNIVERSITY OF HEALTH SCIENCES	1
COLORADO STATE UNIVERSITY	1

COURSE COMPLETION: Equity Analysis for Horticulture

Section 3.2.2. Equity Analysis: Please pay special attention to equity issues -- where a group of students has an achievement rate that is below average. What factors can explain this?

by Race Ethnicity Ancestry			
	Enrollments	Course Co..	Gap
Amer. Indian Alaska Native			
Asian	76	88.2%	
Black African Amer.	22	77.3%	
Filipino	28	92.9%	
Latinx	801	80.3%	-45
Native Hawaiian Pacific Island..			
Two or More	53	81.1%	
Unknown	65	78.5%	
White	449	86.9%	

by Gender			
	Enrollments	Course Co..	Gap
Different Id..	73	75.3%	
Female	582	82.5%	
Male	845	83.8%	

by DSS			
	Enrollments	Course Completion	Gap
Not DSS	1,351	83.0%	
DSS	149	81.9%	

by Foster Youth			
	Enrollments	Course Completion	Gap
Not Foster Y..	1,497	82.9%	

by LGBT			
	Enrollments	Course Completion	Gap
Not LGBT	1,394	83.1%	
LGBT	106	80.2%	

by Low Income			
	Enrollments	Course Completion	Gap
Not Low Income	258	85.3%	
Low Income	1,242	82.4%	

by Military Status			
	Enrollments	Course Completion	Gap
Not Military	1,462	82.6%	-139
Military	38	92.1%	

COURSE SUCCESS: Equity Analysis for Horticulture

Section 3.2.2. Equity Analysis: Please pay special attention to equity issues -- where a group of students has an achievement rate that is below average. What factors can explain this?

by Race | Ethnicity | Ancestry

	Enrollments	Course Success	Gap
Amer. Indian Alaska Native			
Asian	76	85.5%	
Black African Amer.	22	63.6%	
Filipino	28	71.4%	
Latinx	801	67.2%	-90
Native Hawaiian Pacific Islander			
Two or More	53	73.6%	
Unknown	65	66.2%	
White	449	81.1%	

by DSS

	Enrollments	Course Success	Gap
Not DSS	1,351	72.3%	
DSS	149	73.2%	

by Foster Youth

	Enrollments	Course Success	Gap
Not Foster Youth	1,497	72.4%	

by LGBT

	Enrollments	Course Success	Gap
Not LGBT	1,394	72.1%	-60
LGBT	106	76.4%	

by Gender

	Enrollments	Course Suc..	Gap
Female	582	73.5%	
Male	845	72.1%	
Different Id..	73	67.1%	

by Low Income

	Enrollments	Course Success	Gap
Not Low Income	258	77.1%	
Low Income	1,242	71.4%	-71

by Military

	Enrollments	Course Success	Gap
--	-------------	----------------	-----

Degrees + Certificates: Equity Analysis for Horticulture

Section 3.2.2. Equity Analysis: Please pay special attention to equity issues -- where a group of students has an achievement rate that is below average. What factors can explain this?

of Unique Students Earning a Program Award by Type in Last 5 Years in Horticulture

Associate

30

Horticulture Majors in Horticulture Courses

vs.

Horticulture Award Earners

Enrollments Among Horticulture Majors by Race | Ethnicity | Ancestry

Program Awards in Horticulture by Race | Ethnicity | Ancestry

	Total Awards	% of Total Awards
Latinx	25	53%
Unknown	4	9%
White	18	38%

Section 3.3.1: Gateway Course Information. Using the data provided by the OIE, briefly describe how students have moved through your program over the past five years: unit accumulation, prerequisites, corequisites, substitutions, **gateway courses**, and bottleneck courses. (Not all of these measures apply to every program.)

5 Most Enrolled Courses in Horticulture

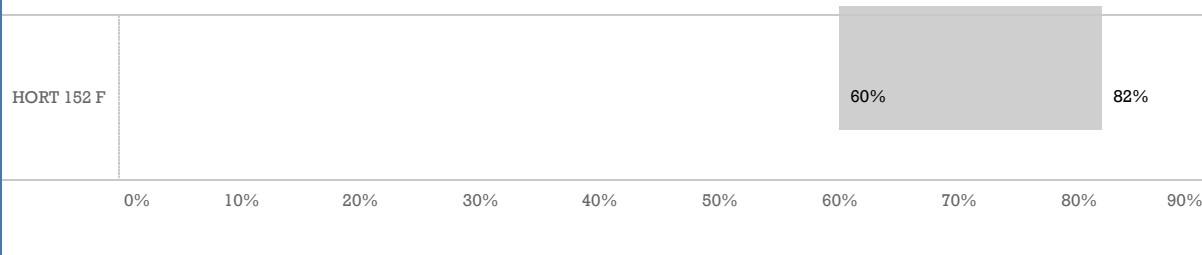
NOTE: 5-year totals

	Enrollments	Students Repeating	% of Students who Repeated	Course Completion	Course Success	Withdraw Rate
HORT 152 F	478	9	1.9%	82%	72%	18%
HORT 001 F	113	0	0.0%	83%	72%	17%
HORT 160 F	99	5	5.3%	71%	64%	29%
HORT 250 F	93	1	1.1%	87%	81%	13%
HORT 002 F	86	1	1.2%	87%	80%	13%

Range of Success Rates by Section:

20th Percentile v. 80th Percentile

(At least 10 Sections Offered)



Disproportion Impact in Top 5 Enrolled Courses by Course by Race | Ethnicity | Ancestry

NOTE: Only Identities with Calculated Disproportion Impact Appear

		Enrollments	Course Success	Gap
HORT 152 F	Latinx	247	66.4%	-31
HORT 001 F	Latinx	63	61.9%	-14
HORT 160 F	Latinx	60	56.7%	-11

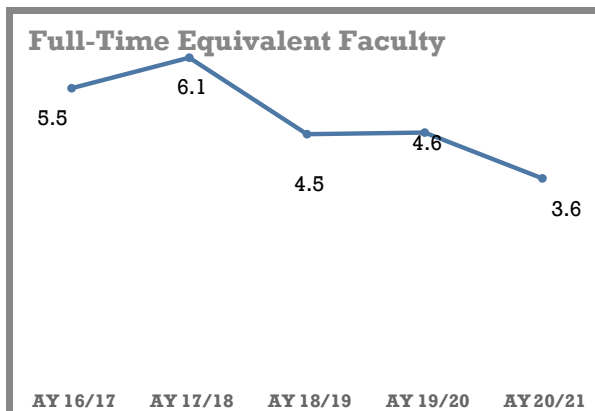
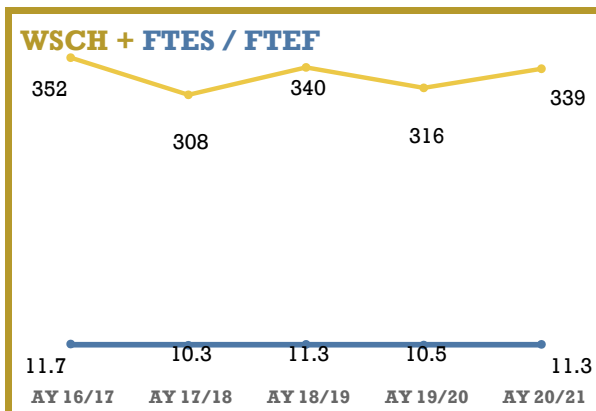
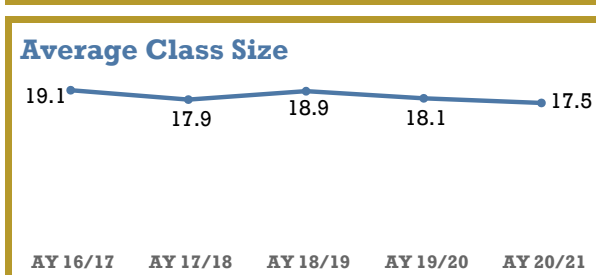
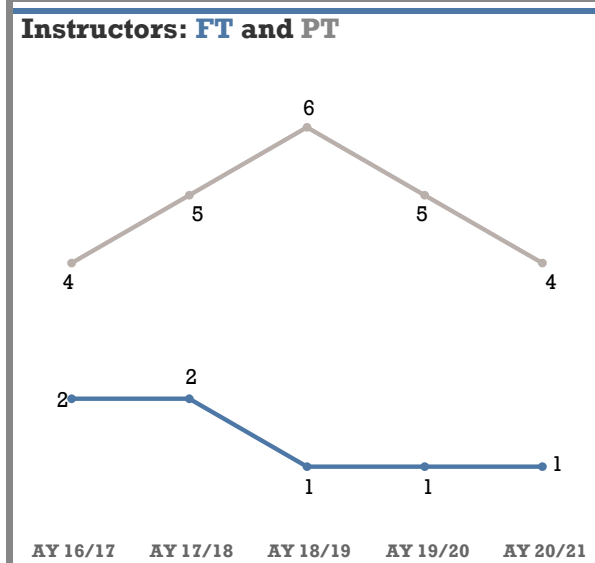
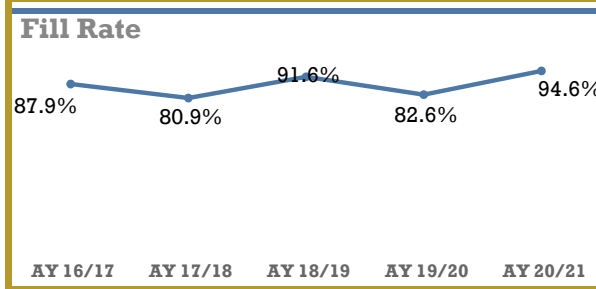
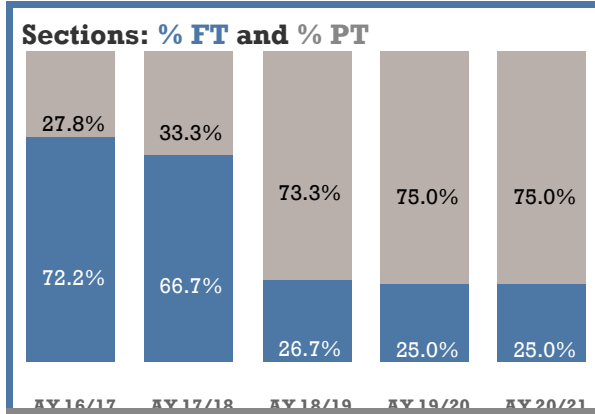
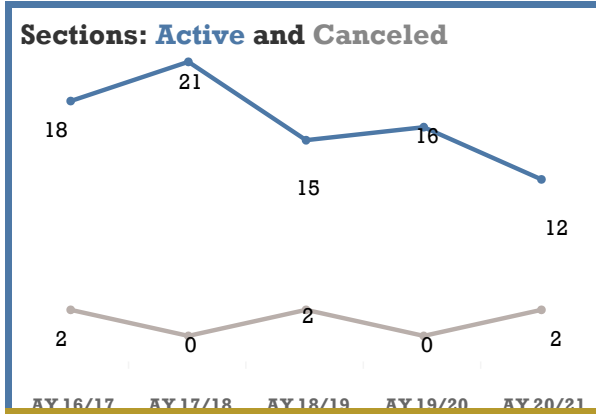
Section 3.3.1: Bottleneck Analysis: Using the data provided by the OIE, briefly describe how students have moved through your program over the past five years: unit accumulation, prerequisites, corequisites, substitutions, gateway courses, and **bottleneck** courses. (Not all of these measures apply to every program.)

Within the last 5 years, courses by course success rate (ascending 5 courses).	Within the last 5 years, the 5 courses with highest % of students repeating the course (NOTE: Some courses may allow for repeat enrollment)	Within the last 5 years, the 5 courses with the highest # of withdrawals	Within the last 5 years, the 5 courses with the highest % of withdrawals
HORT 207 F 52.9%	HORT 160 F 5.3%	HORT 152 F 87	HORT 157 F 37.5%
HORT 205 F 58.1%	HORT 200 F 5.1%	HORT 160 F 29	HORT 160 F 29.3%
HORT 010BF 58.3%	HORT 161 F 4.0%	HORT 001 F 19	HORT 205 F 29.0%
HORT 157 F 62.5%	HORT 255 F 2.1%	HORT 174 F 14	HORT 010BF 25.0%
HORT 164 F 63.2%	HORT 152 F 1.9%	HORT 250 F 12	HORT 207 F 23.5%

**Range of Success Rates by Section:
20th Percentile v. 80th Percentile**
(>=10 Sections, 100+ Enrollments, >=25 % Point Difference)

Horticulture Faculty:

Section 3.4.1 Faculty: Using the data provided by the OIE, briefly describe the faculty workload over the past five years: FTF (full-time faculty), PTF (part-time, or “adjunct” faculty), FTEF (full-time equivalent faculty), WSCH per FTEF (weekly student contact hours). (Not all of these measures apply to every program.)



**% of Enrollments Over the Last 5 Years in
 GE Courses**

	% of	
	Enrollments	Enrollments
Non-GE Enrollments	64.9%	974.0
GE Enrollments	35.1%	526.0

**Courses that Fulfill CSU General Education Requirements or the Intersegmental General
 Education Transfer Curriculum (IGETC)**

(CSU and IGETC: 1 = Yes; 0 = No)

Course	CSU	IGETC	Enrollments	% Majors	Avg. First-Time	% Age: Under 20	% Evening	% Online
HORT 152 F	1	0	478.0	0%	4%	19%	20%	0%
HORT 205 F	1	0	31.0	0%	0%	0%	42%	0%
HORT 207 F	1	0	17.0	0%	6%	0%	100%	0%
Grand Total	1	0	526.0	0%	4%	18%	25%	0%

Appendix B: SLO data

This data is still off-limits to the OIE because it is housed in eLumen. The Faculty Senate only allows faculty members to have access to SLO data on eLumen. The Senate’s SLO Assessment Committee will work with its division reps to help departments disaggregate SLO data, just as KPI data is disaggregated in Appendix A.

Fullerton College

HORT CSLO report for PR - 2016-21 - all courses by
 Demographic Category with Demographic Element

	Greatly exceeds expectations.		Exceeds expectations		Meets expectations		Does not meet expectations but developing		Does not meet expectations	
African American	0	0.00%	0	0.00%	20	83.33%	0	0.00%	4	16.67%
American Indian/Alaskan Native	0	0.00%	1	5.88%	15	88.24%	0	0.00%	1	5.88%
Asian	0	0.00%	0	0.00%	90	92.78%	0	0.00%	7	7.22%
Filipino	0	0.00%	0	0.00%	14	93.33%	0	0.00%	1	6.67%
Hispanic	0	0.00%	4	0.65%	485	78.99%	0	0.00%	125	20.36%
Pacific Islander	0	0.00%	0	0.00%	2	100.00%	0	0.00%	0	0.00%
Unknown	0	0.00%	1	5.56%	13	72.22%	0	0.00%	4	22.22%
Unspecified	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
White Non-Hispanic	0	0.00%	2	0.43%	403	86.30%	0	0.00%	62	13.28%

SLO Data



Horticulture Dept. -
01035809-course-sta

Appendix C: Other data

In addition to the KPI and SLO data, departments may wish to include other data that it finds in Tableau or other sources.



groundskeeper_805
90.pdf



2021-csea-salary-sc
hedule_21898.pdf