**Bakersfield College**

**Program Review – Annual Update**

**I. Program Information:**

Program Name: Agriculture - Ornamental Horticulture

Program Type:  Instructional  Non-Instructional

Program Mission Statement: The mission of the Bakersfield College Agriculture Department is to provide pertinent state-of-the-art education for vocational and transfer students in order to produce skilled Ornamental Horticulture professionals for the industry, both public and private. This is in accordance with the college mission to respond to student and community needs with efficiency and flexibility and with the BC institutional level learning outcomes, i.e. to demonstrate knowledge and abilities in a chosen area of study.

Program Description: Describe how the program supports the Bakersfield College Mission.

Ornamental Horticulture is a Career Technical Education (CTE) program. Therefore, our certificate programs align with one of the core missions of Bakersfield College, and that is to supply trained individuals to work in vocational jobs of regional agricultural businesses. Horticultural supervisory level jobs have increased about 4% in Kern County and in California. The horticulture industry is estimated to have a statewide economic activity well over $10 billion annually, with approximately 60% centered in Southern California. Services and uses account for slightly more than 50% of the total economic activity, production about 20%, and equipment and accessories about 30%.

All of our course offerings in Ornamental Horticulture are transferable to the CSU. This discipline can also lead to a four year degree or higher. Therefore, we also meet the third Budget Decision Criteria for transfer.

The closest competing school with an horticulture program is over 70 miles away at College of Sequoias (COS) in Visalia.

**II. Program Assessment (focus on most recent year):**

1. How did your outcomes assessment results inform your program planning?

A program outcome is to produce job ready students and student degrees. The goal was to increase degrees and certificates and results from previous years show a need for improvement. We will continue to follow up with students to increase awareness about degrees. We are also working on streamlining the program to fall in line with proposed AS-T’s; increasing outreach to improve numbers with articulation of classes to improve completion by incoming high school students.

1. How did your outcomes assessment results inform your resource requests?

Industry advice for skilled students was followed and this resulted in a new dialogue with employers for potential employees and internships. Funding was requested to increase outreach, improve educational planning, increase degree completion and improve internships.

1. Instructional Programs only**:** How do course level student learning outcomes align with program learning outcomes? All student learning outcomes are based upon the following PLO’s.
   * Demonstrate managerial and leadership abilities in Ag classes for employment that will enhance opportunities and success in the agriculture industry in the 21st century.
   * Master skills needed for baccalaureate level education or obtain a certificate at B.C
   * Demonstrate specific skills within agriculture disciplines needed for employment.
2. How do the program learning outcomes align with Institutional Learning Outcomes?

The program learning outcomes align within the ILO’s.

1. Describe *any significant changes* in your program’s strengths since last year.  
   The program has increased its community connection with the horticultural industry and the public through the outreach program. Donations to the program also continue.
2. Describe *any significant changes* in your program’s weaknesses since last year.

A lack of funding continues to create challenges for lab classes. Degree and certificate applications have not increased with students entering the regional workforce before completion.

1. If applicable, describe any unplanned events that affected your program.

Becoming Agriculture department chair was taxing upon the instructor and resulted in fewer classes taught in horticulture. Some classes needed for degree completion have not been available to students in a timely manner.

**III. Resource Analysis:**

1. Human Resources
2. If you are requesting any additional positions, explain briefly how the additional positions will contribute to increased student success. (Faculty Request form; Classified Request form)
3. Professional Development (Professional Development form)
4. Describe briefly the effectiveness of the professional development your program has been engaged with (either providing or attending) during the last cycle, focusing on how it contributed to student success.

Attendance at California Agriculture Teachers Association CATA conferences has resulted in unifying classes to develop curriculum to align with C-ID. In-service programs at the events also resulted in improving classroom management. Due to campus job duties the instructor was not able to attend industry trade shows and conferences to stay current with industry trends.

1. Provide rationale for future professional development opportunities and contributions that your program can make.

Continuing to work with the CATA will allow this program to stay current with other California community colleges who teach horticulture classes. Professional development with industry events will allow this program to network and improve relationships for donations, internships and industry trends.

1. Facilities (M&O requests can be submitted by completing the [M&O request form](https://committees.kccd.edu/sites/committees.kccd.edu/files/Copy%20of%2012%20M%26O%20Needs%20Workbook%2012-13%20APR.xlsx).)

Has your area received any facilities maintenance, repair or updating in this cycle?

1. If yes, how has the outcome contributed to student success?
2. If no, how will your facilities request contribute to student success? No. Teaching in a classroom that only has one evaporative cooler creates noise that competes with lecture presentations. It also is an ineffective cooling device when temperatures reach the upper 90 degrees range and higher. This creates a poor learning environment when students are uncomfortable due to high humidity.
3. Technology (Technology requests can be made by filling out the [ISIT Request form](http://www.bakersfieldcollege.edu/irp/Annual%20Program%20Reviews/2012-13/13%20ISIT%20Priority%20Workbook%2012-13.xlsx).)
4. Has your program received new or repurposed technology in this cycle?
   1. If yes, how has this technology contributed to student success?
   2. If no, how will your new or repurposed technology request contribute to student success?   
      No. Computers are very common in business and having laptops for the students to use while in the field would enhance the learning experience. Bring in lap top computers and a cart to house them securely.
5. Do you need new or repurposed classroom technology to support student success and/or new office technology to support faculty/staff success? Justify your request. Computers are very common in business and having laptops for the students to use while in the field would enhance the learning experience.
6. Budget (Changes to the budget allocation can be requested using the [Budget Change Request Form](http://committees.kccd.edu/bc/committee/programreview)).

If you are requesting any additional funding, explain briefly how it will contribute to increased student success. Costs for supplies have continued to rise and the annual education budget continues at $1,000 which does not allow the program to fund lab supplies for all of the classes taught.

**IV. Trend Data Analysis:**

Highlight *any significant changes* in the following metrics and discuss what such changes mean to your program.

1. Changes in student demographics (gender, age and ethnicity). The Hispanic population has risen and African American has dropped.
2. Changes in enrollment (headcount, sections, course enrollment and productivity). Enrollment dropped due to department chair duties, fewer classes were taught.
3. Success and retention for face-to-face, as well as online/distance courses. Overall success and retention (face to face only) continues to be higher than the college percentages.
4. Other program-specific data that reflects significant changes *(please specify or attach).*

**V. Progress on Program Goals:**

1. List the program’s current goals. For each goal (minimum of 2 goals), discuss progress and changes. If the program is addressing more than two (2) goals, please duplicate this section.

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| **Program Goal** | **Which institutional goals from the Bakersfield College Strategic Plan will be advanced upon completion of this goal?**  **(select all that apply)** | **Progress on goal achievement**  **(choose one)** | **Comments**  **(if applicable)** |
| 1. Facility Needs - Learning Environment   Poor Horticulture lab conditions combined with a lack of funding does not allow instructors to teach with the newest technology. A lack of classroom space and updated lab facilities does not allow the goal to teach the latest technology. | 1: Student Success  2: Communication  3: Facilities & Infrastructure  4: Oversight & Accountability  5: Integration  6: Professional Development | Completed:  \_\_\_\_\_\_\_\_\_\_ (Date)  Revised: \_\_\_\_\_\_\_\_\_\_ (Date)  Ongoing: \_\_\_\_\_\_\_\_\_\_ (Date)  **Not Met.** | No Progress has been made. The horticulture lab has a space heater, evaporative cooler both with very noisy blowers when they are working. Neither heat nor cool efficiently. Toilets and wash sinks are on a septic tank system and need to be pumped multiple times per year. Labs are crowded and potentially dangerous working conditions. This is an area outside of the department’s ability to fund. A lack of classroom, lab and storage space will not allow the program to increase class size, work safely with larger enrollments and teach with present technology. Need lap tops and a lap top cart. |

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| **Program Goal** | **Which institutional goals from the Bakersfield College Strategic Plan will be advanced upon completion of this goal?**  **(select all that apply)** | **Progress on goal achievement**  **(choose one)** | **Comments**  **(if applicable)** |
| 1. Develop industry partners to increase internships and hands-on learning | 1: Student Success  2: Communication  3: Facilities & Infrastructure  4: Oversight & Accountability  5: Integration  6: Professional Development | Completed:  \_\_\_\_\_\_\_\_\_\_ (Date)  Revised: \_\_\_\_\_\_\_\_\_\_ (Date)  Ongoing: \_\_\_\_\_\_\_\_\_\_ (Date) | Industry networking and partnership continues on an ongoing basis. Internship information is sent to the CTE internship personnel. The program has developed a relationship with the CLCA California Landscape Contractors Association. Their support has developed work projects with professional, presentations and donations for the program. |

1. New or revised goals (if applicable)

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| **New/Replacement Program Goal** | **Which institutional goals from the Bakersfield College Strategic Plan will be advanced upon completion of this goal? (select all that apply)** | **Anticipated Results** |
| A horticulture Lab with updated classroom, greenhouses, additional storage and shade house | 1: Student Success  2: Communication  3: Facilities & Infrastructure  4: Oversight & Accountability  5: Integration  6: Professional Development | New classroom with air conditioning. Bathroom on a sewer line. Greenhouses with modern technology controls. Storage building for donations and to house equipment securely. A shade house structure not threatening to fall down. |

**VI. Curricular Review (Instructional Programs only):**

1. Review of Course Information:
   * Column A list all of the courses associated with the degree.
   * Column B list the Fall term the review process will be started for ongoing compliance.
   * Column C list the compliance due date.
   * Column D list any changes to courses with regard to distance education.
   * Column E list corresponding C-ID descriptors if available. <http://www.c-id.net/>

**\*\*Dates listed should reflect a five year cycle allowing for one year of review**

**to maintain ongoing compliance.\*\***

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| **A. Course** | **B. Fall Term Review will be Submitted** | **C. Compliance Due Date** | **D. Distance Education Changes** | **E. C-ID Descriptors Available** |
| ORNH B1 | 03/13 | 03/19 |  |  |
| ORNH B2 | 03/13 | 03/19 |  |  |
| ORNH B3 | 03/13 | 03/19 |  |  |
| ORNH B4 | 04/13 | 04/19 |  |  |
| ORNH B5 |  | Discontinued |  |  |
| ORNH B6 | 03/13 | 03/19 |  |  |
| ORNH B7 | 03/13 | 03/19 |  |  |
| ORNH B8 | 03/13 | 03/19 |  |  |
| ORNH B36 | 04/11 | 04/17 |  |  |
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1. Review of Program Information:

Is the program information housed in CurricUNET accurate? (Considerations: changes in course(s) names and/or suffixes as well as additions/deletions of courses). If not, then a program modification needs to be started in CurricUNET to reflect the necessary changes. Explain the requested changes below.

ORNH B5 to be discontinued.

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Is the program and course listing information in the current catalog accurate? If not, list the requested

changes below. Catalog information should reflect what is in CurricUNET.

ORNH B5 to be discontinued.

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1. Student Education Plan (SEP) Pathway(s) uploaded to “Attached Files” in CurricUNET.

If applicable, SEP Pathway with CSU Breadth indicated? **Yes** or No

If applicable, SEP Pathway with IGETC indicated?  **Yes** or No

If applicable, SEP Pathway with BC General Education indicated? **Yes** or No

**\*\*Please ensure that the information housed in CurricUNET and the current catalog match. \*\***

1. If applicable, provide a description of the program’s future adoption of C-ID descriptors and Associate Degree for Transfer (ADT) or Model Curricula.

Ornamental Horticulture is listed under a plant science AS-T ADT. This program will adjust to the state C-ID and AS-T listings.

**VII. Conclusions and Findings:**

Present any conclusions and findings about the program.

**VIII. Attachments (place a checkmark beside the forms listed below that are attached):**

[Faculty Request Form](http://committees.kccd.edu/bc/committee/programreview)  [Classified Request Form](http://committees.kccd.edu/bc/committee/programreview)  [Budget Change Request Form](http://committees.kccd.edu/bc/committee/programreview)

Professional Development  [ISIT Form](http://committees.kccd.edu/bc/committee/programreview)  [M & O Form](http://committees.kccd.edu/bc/committee/programreview)

[Best Practices Form](http://committees.kccd.edu/bc/committee/programreview) **(Required)**  Other: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**IX. Certificates of Achievement:**

Programs with stackable certificates fill out the following form.

Stand alone certificates fill out the entire Annual Update.

**Certificate Form**

**Annual Update 2014-15**

**Name of Program:** \_\_\_\_ Environmental Horticulture \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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| **Certificate Name** | **JSC** | **CA** | **Is the certificate stackable?** | **Is the certificate a**  **stand alone program?** |
| Environmental Horticulture |  | x | yes | no |
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Please discuss the following questions regarding all area Certificates of Achievement (CA):

1. List certificates that are proposed for *addition*.
2. List certificates that are proposed for *deletion*.
3. For this CA, what are the SOC codes (Occupational Titles and codes) that students who complete the CA will be able to obtain entry-level employment in, and what are the projected annual openings and median salary for each occupational title? You can use your latest Program Review data for your response.
4. For this CA, what process was followed to ensure the required and possible elective courses were adequate for entry level employment (such as advisory committee input, surveys, industry feedback, licensing or accreditation agencies)? How often do/will you re-examine the effectiveness of certificate requirements?
5. What is your annual completion target (number of certificates awarded) for this CA? What was the number of awards in this CA for each of the past three years? Based on your results, what changes could you make in your program to meet or continue to exceed your target (such as course content, scheduling/sequence, outreach, instructional strategies)?
6. Based on what you know about your area, what emerging/potential institutional factors (internal) and industry factors (external) will impact this certificate? How are you planning to incorporate these factors in your planning and evaluation of this certificate?