# INSTRUCTIONAL COMPREHENSIVE PROGRAM PLANNING AND REVIEW (CPPR) FOR 2023

Only to be completed by those programs scheduled for the year according to the institutional comprehensive planning cycle for instructional programs (i.e., every four years for CTE programs and five years for all other instructional programs), which is produced by the Office of Instruction. Faculty should meet with their dean prior to beginning this process. Training is available to support faculty completing this work.

**Cluster: Workforce and Economic Development** 

**Program:** Welding **Current Academic Year:** 2022-2023

Last Academic Year CPPR Completed: 2/10/19 Current Date: 2/28/23

NARRATIVE: INSTRUCTIONAL CPPR

Please use the following narrative outline:

I. Describe how this program review was conducted, including how all program members were involved in the planning process.

#### II. GENERAL PROGRAM INFORMATION

Program Mission: The mission of the Cuesta College Welding Program is to provide a comprehensive welder training experience reflective of local industry needs, CSU transfer needs and local community member interests. Training is focused on workplace readiness, developing hands on skill supported by technical knowledge to ensure students acquire the essentials in order to enter the profession of welding, welding inspection and other welding related careers.

#### Brief history of the program

Historically, the Welding Technology program has been popular among students pursuing a variety of career/educational pathways. Target groups have included students who are interested in welding as a career, transfer students moving on to further education in manufacturing or engineering and life long learners who seek enrichment for hobby or side job pursuits. Additionally, the program has supported other college programs such as art, auto and construction technology. Many of the engineering degrees include welding as a support course in their curriculum. Target groups have expanded to include industry professionals returning to obtain education for career advancement, Cal Poly students majoring in engineering and agricultural education as well as high school students who are getting an early start on their college education.

### Include significant changes/improvements since the last Program Review

- Launched and expanded the High School Dual Enrollment offerings. Have expanded courses and now have seven spread between all our local high schools
- Additional welding equiptment to meet industry welding standards
- Completed a major, close to a \$1,000,000, renovation of the SLOC shop facility and updated welding booths by the removal of asbestos siding and installing new welding tables.
- Dermatic change in welding department, lead instructor Rob Thorsen retired due to a medical condition from manganese poisioning from welding fumes inhaled in his employment as a full time instructor.
- The new hire of a welding technician to assist the welding department in material Processing, machine maintenance

## List current faculty, including part-time faculty

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Mike Fontes, CWI, Department Chair – FT @ SLOC
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(Structural Steel Certification, GMAW/GTAW, Welding Power, Blueprint Reading & Pipe Certification)

Tim Fay, CWI - PT @ SLOC

(Welding Fabrication)

William Barkhuff - PT @ SLOC

(Metallurgy)

Toyon Proux – PT @ SLOC

(Basic Welding)

Chris Hildebrand – PT @ NCC, Templeton High School

(Basic Welding, Advanced Welding & HS Dual Enrollment)

Justin Pickard – PT @ NCC, Paso Robles High School

(Basic Welding, Advanced Welding, Welding Fabrication & HS Dual Enrollment)

Kory Fontes – PT @ SLOC & NCC

(Basic Welding and Advanced Welding)

Armondo Perez-PT@SLOC

(Basic Welding)

Jonathon Gray- PT @SLOC

(Basic Welding and Advanced Welding)

Zachary Cherry PT @ NCC, Templeton High School

(Advanced Welding)

#### Describe how the Program Review was conducted and who was involved

The Welding Technology Program Review is conducted by the Department Chairperson with inclusion of the Welding Technology Advisory committee and Part Time Faculty members. The process involves collection and review of institutional program data for the last four years, evaluation of the eLumen data and review of the previous CPPR document including its relative program improvement assertions along with analysis of the APPR documents completed since the last CPPR. Once this task is completed, the major program improvement assertions from previous reports are modified to reflect progress and new assertions are made in response to local educational and welding industries through the advisory committee mechanism.

Please highlight any changes and improvements since the last Comprehensive Program Review. Be sure to specifically indicate those changes that have been made in the program in order to address equity gaps.

No additional program improvments made in college level circulum. There has been an increase in dual enrolement with the addition of 3 more sites

III. PROGRAM SUPPORT OF DISTRICT'S <u>MISSION STATEMENT</u>, <u>INSTITUTIONAL GOALS</u>, <u>INSTITUTIONAL OBJECTIVES</u>, AND/OR <u>INSTITUTIONAL LEARNING OUTCOMES</u>

Identify how your program addresses or helps to achieve the <u>District's Mission</u>

Statement.

## **Connections to the College Mission:**

The Welding Technology Program, by design, encompasses all aspects of the college mission. Welding courses are designed to involve one third technical training and two thirds hands on manipulative training. Academics and critical thinking skills are utilized in virtually all courses to include mathematics, chemistry and physics, electronics and English. All are utilized in the welding courses and delivered in such a manner to meet the needs of diverse learning styles.

The welding staff is comprised of 10 individuals who work cooperatively and positively in order to serve our students. Virtually all of the adjunct instructors work at capacities which are far and above the requirements of a part time position. They assist in conducting advisory meetings, contests, workshops, managing shop facilities and other extra tasks. The positive relationship shared by the instructors emulates through the program significantly benefitting the students as they progress through the certificate and/or degree pathways.

Our program is designed to meet the diverse needs of our community, as well as those of local industry. We service students who are pursuing a career in the welding industry, transfer students and existing Cal Poly students, as well as individuals of the community seeking enrichment whereby they may want to learn welding in order to complete personal projects. Regardless of the student's

individual goals, they can expect a comprehensive program that has been designed by faculty and local industry to be reflective of current industry needs. All aspects of curriculum and degrees are thoroughly scrutinized by the Cuesta College Welding Advisory Committee.

## Cuesta College Values:

#### Access:

Welding courses are offered at all times of the day and evenin at the San Luis Obispo and North County campuses. This enables the inclusion of all types of students such as transfer students as well as students engaged in full time employment.

#### Success:

Success of our students can be evidenced by the growth in the success rate data to be covered later in this report, as well as by actual program completers, transfer recipients and local industry reports.

#### Excellence:

Faculty members of the Welding Technology program are made up of industry professionals who are concerned with providing the highest quality of welding education possible. There are two full time faculty members and six part time instructors. Over half of the welding instructors are currently working full time in industry, and/or have over ten years of experience working in the field. Three members are Certified Welding Inspectors through the American Welding Society. All members are actively engaged in program review, curriculum development and extracurricular programs such as Skills USA and hosting of the California FFA Agricultural FFA Welding contest.

Identify how your program addresses or helps to achieve the <u>District's Institutional</u>

Goals and Objectives, and/or operational planning initiatives.

**Institutional Goal 1: Completion** 

Increase the rates of completion for degrees, certificates, and transfer-readiness overall for all students.

For the last several years the Welding Program at Cuesta College has focused a high degree of effort with in-house counseling of students to obtain their respective Welding degrees and certificates. The last three Program Review efforts established the increase of degree and certificates awarded as primary improvement assertions and those efforts will show in the institutional data later in this report.

**Institutional Goal 2: Access** 

Increase student access to higher education.

Currently the Welding Program is conducting four Dual Enrollment courses with two local High Schools. During the last semester (Fall 2023) there are five non-credit welding courses

being taught between SLOC and NCC campuses. Additionally, Mike Fontes serve on local high school Advisory Committees. The program also maintains strong relations with Cal Poly and high schools state wide through the FFA State Final Welding competition.

Identify how your program helps students achieve <u>Institutional Learning</u> Outcomes.

## ILO 1. Personal, Academic, and Professional Development

#### Students achieving this outcome will be able to:

 Recognize, assess, and demonstrate the skills and behaviors that promote academic and professional development

Cuesta College welding students are involved in industry certification courses that are 1/3 academic/technical and 2/3 applied. Students must acquire the professional knowledge about code acceptance criteria and be able to evaluate their work in terms of what is expected in industry.

 Recognize, assess, and practice lifestyle choices that promote personal health and mental well-being

Environmental hygiene is emphasized and all appropriate Personal Protective Equipment (PPE) is required at all times when working in the shop environment. Additionally, instructors teach about the industrial health screenings and drug testing requirements which have become the norm in the welding workplace.

• Demonstrate the professional skills necessary for successful employment

The Welding Program at Cuesta College is supported by a robust Advisory Committee consisting of different local industry representatives. The local service area needs are communicated through regular meetings (1 per year). All Student Learning Outcomes were developed with and by the Advisory members. A SLO Assessment survey tool is currently being developed whereby the Advisory members will assess our success with students achieving SLO's. Through this mechanism professional skills have been accurately identified and are conveyed throughout all the welding courses.

## **ILO 2. Critical Thinking and Communication**

#### Students achieving this outcome will be able to:

Analyze and evaluate their own thinking processes and those of others

Student presentations are required in our Blueprint Reading/Materials Processing course. These are delivered in a cooperative group structure whereby presentation teams are formed and evaluations are completed by the students observing the presentations.

Communicate and interpret complex information in a clear, ethical, and logical manner

The Welding Certification courses are largely based on the Codes and Standerds that govern the industry. Students receive vigorous instruction on these codes and are expected to be able to interpret them in the form of written exams as well as through hands on application.

## **ILO 3. Scientific and Environmental Understanding**

#### Students achieving this outcome will be able to:

 Draw conclusions based on the scientific method, computations or experimental and observational evidence

Welding Metallurgy students perform several scientific experiments and observations. This has been evidenced by our student's recent successes in the AWS Welding Poster competitions at the national level.

Construct and analyze statements in a formal symbolic system

Most, if not all, of the welding labs and projects are completed to very specific written procedures whereby shop prints and welding symbols must be interpreted.

## **ILO 4. Technical and Informational Fluency**

Students achieving this outcome will be able to:

 Recognize when information is needed, and be able to locate and utilize diverse sources effectively and ethically

Students in all welding courses are required to compile a resource binder that consists of information from a variety of sources including manufacturer data, welding codes and standards, class notes, computer searches, power points et. These information resource binders are evaluated by the instructors as the last mid- term usually and are then in turn used in the completion of a comprehensive final exam exercises.

## Produce and share electronic documents, images, and projects using modern software and technology

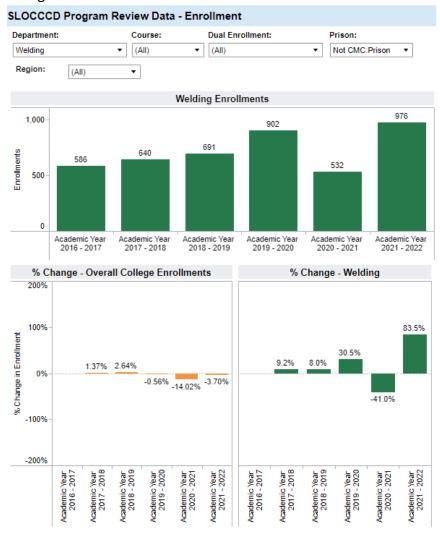
Welding students utilize Google Sketch Up, Auto Cad and Solid Works to design shop drawings for various labs.

## IV. PROGRAM DATA ANALYSIS AND PROGRAM-SPECIFIC MEASUREMENTS (Where applicable the success metrics are aligned with the Student Success Metrics/SCFF).

The data components are hyperlinked below.

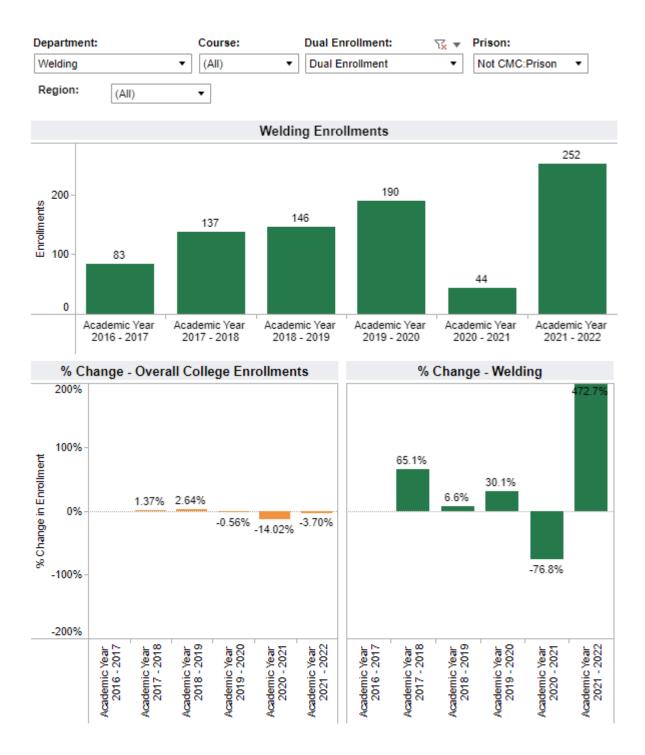
## A. General Enrollment (Insert Aggregated Data Chart)

Insert the data chart and explain observed differences between the program and the college.



Enrollment: Duplicated count of students who completed greater than 0 units in positive attendance courses or were present on census for all other accounting methods.

This chart depicts the total overall enrollments for the welding department

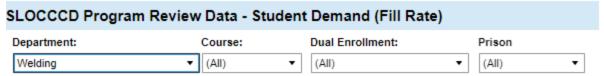


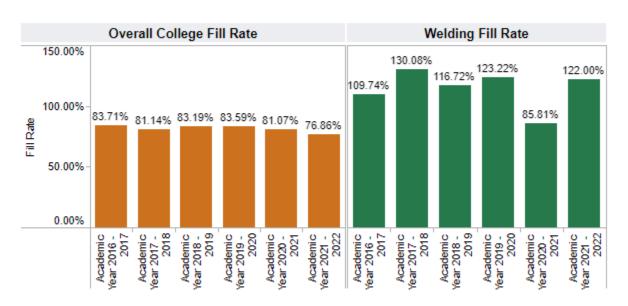
Enrollment: Duplicated count of students who completed greater than 0 units in positive attendance courses or were present on census for all other accounting methods.

This is our highschool enrollment separated from the prior graph. It should be noted the increase in enrolment for the 2021-2022 year. This has had a positive effect on the overall number of FTES but has recreased our beginning class enrolment for the Slo capmus

## B. General Student Demand (Fill Rate) (Insert Aggregated Data Chart)

Insert the data chart and explain observed differences between the program and the college.





Fill Rate: The ratio of enrollments to class limits. Cross listed class limits are adjusted appropriately.

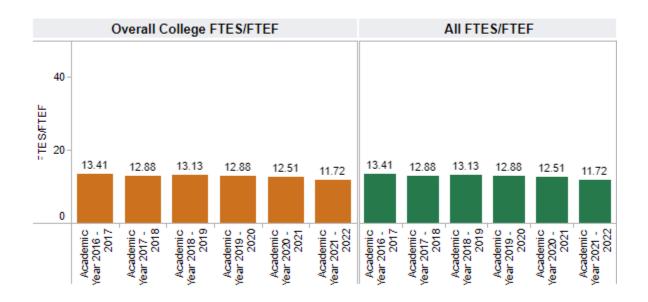
Also, courses with zero class limits are excluded from this measure.

In viewing the data against the overall fill rate, the welding department has had a better rebound from the Pandemic when we scaled back to online lectures and in class welding assignments.

## C. General Efficiency (FTES/FTEF) (Insert Aggregated Data Chart)

Insert the data chart and explain observed differences between the program and the college.

#### 

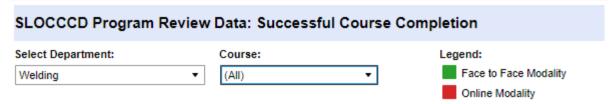


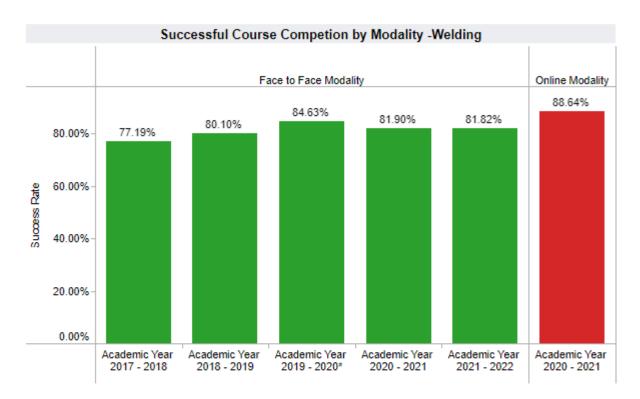
FTES/FTEF: The ratio of total FTES to Full-Time Equivalent Faculty (SXD4 Total-Hours/17.5)/XE03 FACULTY-ASSIGNMENT-FTE)

Efficiency Narrative: Efficiency remains a challenge for the Welding Program as it does for most of the CTE areas. Challenges include: Safety implications of teaching welding to numbers that exceed 20 students, limited available work stations and floor space and nature of our clientele: largely working class, being unable to schedule lecture/lab splits

## D. Student Success—Course Completion by Modality (Insert Data Chart)

Insert the data chart and explain observed differences between the program and the college.



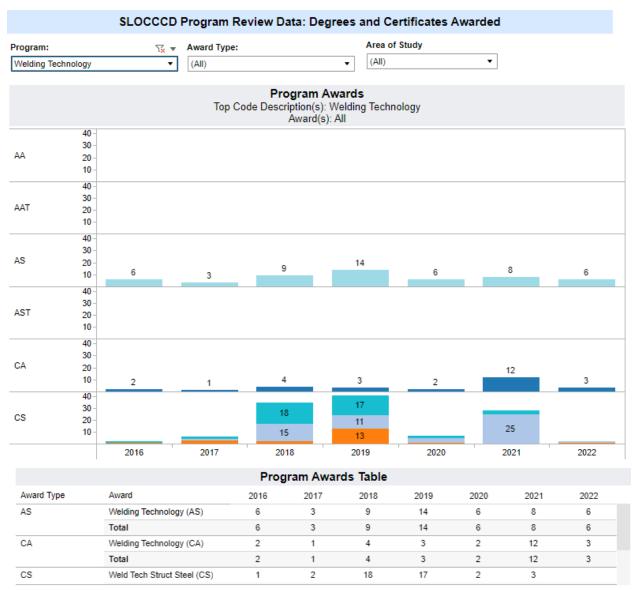


|                 | Successful Course Competion by Modality Table - Welding |                                 |                                 |                                  |                                 |                                 |  |  |  |  |  |
|-----------------|---|---------------------------------|---------------------------------|----------------------------------|---------------------------------|---------------------------------|--|--|--|--|--|
|                 |   | Academic<br>Year 2017 -<br>2018 | Academic<br>Year 2018 -<br>2019 | Academic<br>Year 2019 -<br>2020* | Academic<br>Year 2020 -<br>2021 | Academic<br>Year 2021 -<br>2022 |  |  |  |  |  |
| Face to Face    | Department Success Rate                                 | 77.19%                          | 80.10%                          | 84.63%                           | 81.90%                          | 81.82%                          |  |  |  |  |  |
| Modality        | Total Department Enrollments                            | 640.0                           | 605.0                           | 665.0                            | 317.0                           | 697.0                           |  |  |  |  |  |
| Online Modality | Department Success Rate                                 |                                 |                                 |                                  | 88.64%                          |                                 |  |  |  |  |  |
|                 | Total Department Enrollments                            |                                 |                                 |                                  | 44.0                            |                                 |  |  |  |  |  |

Data reflects a favorable completion number for the welding program in compaision to the colleges figures

## E. Degrees and Certificates Awarded (Insert Data Chart)

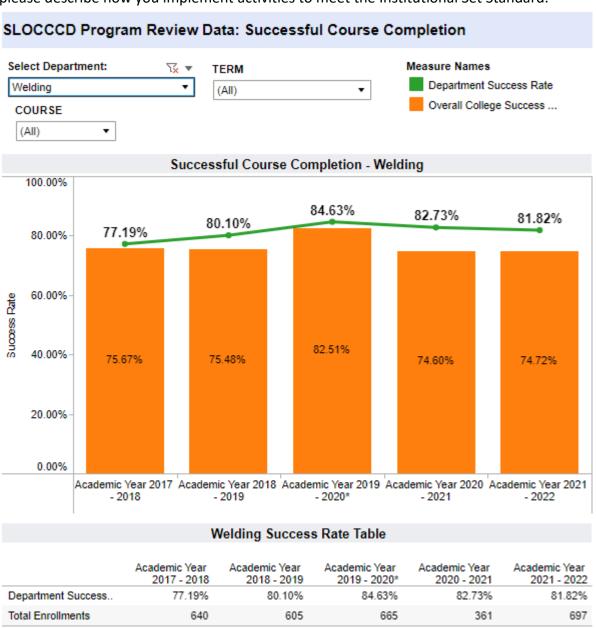
Insert the data chart and explain observed differences between the program and the college.



Program Awards: The number of degress and certificates awarded by program type

After the rebound from the Covid Pandemic the awarded degrees suffered from the fact that students were unable to complete there required courses to attain a degree and a certificate in welding. We did provide American Welding certificates for welding in industry and are not part of the data provided in the graph. Typical welding certifications awarded were on average 12 per semester.

F. <u>General Student Success – Course Completion (Insert Aggregated Data Chart)</u>
Insert the data chart and explain observed differences between the program and
<u>Institutional Set Standard</u>. If your program did not meet the Institutional Set Standard,
please describe how you implement activities to meet the Institutional Set Standard.



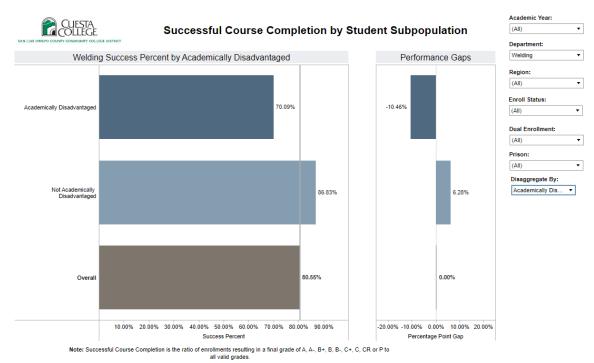
Welding Department exceeded college success standard with a slight decease of less than a percent from the previous years. The trend is looking on a downward trend from the height prior to Covid

What resources might you need to meet and exceed the Institutional Set Standard?

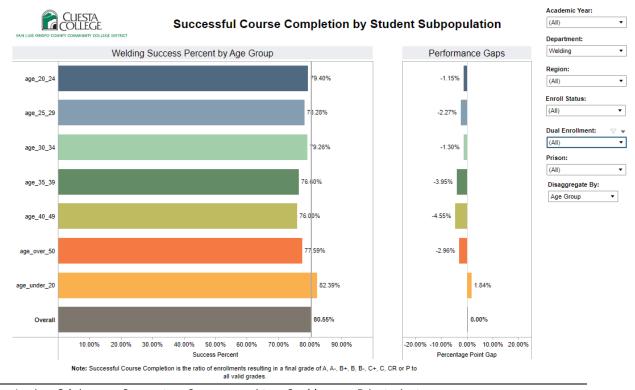
N/A

<sup>13</sup> San Luis Obispo County Community College District Instructional Comprehensive Program Planning & Review Approved by Academic Senate April 22, 2022 Document to be Used for Submission Spring, March 6, 2023

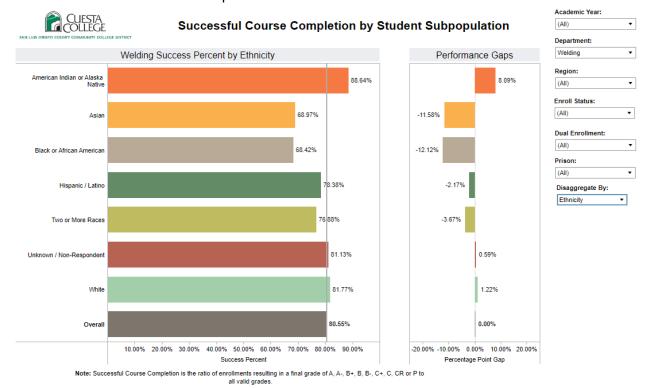
G. Review the <u>Disaggregated Student Success</u> charts; include any charts that you will reference. Describe any departmental or pedagogical outcomes that have occurred as a result of programmatic discussion regarding the data presented.



Looking at the data the Academically Disadvantaged is really a low number considered that we cater to a student base that is looking to enter a career technical field.



The above cart that deals with age groups is more interesting with the performance gap in the highest range of mid life adults, 4.55%. Not to be surprised is the data on the under 20 which seem to have a positive 1.84%



Looking at the questions below I find it very interesting the demographics provided to us by the enrollment from our local community relative to the graph above, can there be a classroom strategy on a teaching basis the would single out one group over the other to entice a better subpopulation of completeion with out raising a bias to one or more ethjnic group.

The following are some questions you might want to consider:

- What strategies have you implemented to address equity gaps in the classroom?
- What type of professional development opportunities are your program faculty participating in to address equity in the classroom?
- What resources might you need to minimize equity gaps?

## Other Relevant Program Data (optional)

Provide and comment on any other data that is relevant to your program such as state or national certification/licensure exam results, employment data, etc. If necessary, describe origin and/or data collection methods used.

## V. PROGRAMS AND CURRICULUM REVIEW

## A. Programs Review

a. Review the CurricUNET "Program of Study" outline for each program and indicating yes/no for each program/certificate.

| Course<br>(Prefix /<br>Number) | Currently<br>active   | New course since<br>last CPPR | Major<br>modification<br>since last CPPR | Minor<br>modification<br>since last<br>CPPR | Deactivated since<br>last CPPR<br>Notified impacted<br>program(s)* |
|--------------------------------|-----------------------|-------------------------------|--|---|--|
| WELD 101                       | <mark>yes</mark> / no | no /<br>yes: date             | no /<br>yes: date                        | no /<br>yes: date                           | no /<br>yes: date  |
| WELD 252                       | yes / no              | no /                          | no /                                     | no /  | no /   |
|                                |                       | yes: date Spring<br>2019      | yes: date                                | yes: date                                   | yes: date  |
| WELD 270A                      | <mark>yes</mark> / no | no /                          | no /                                     | no /  | no /   |
|                                |                       | yes: date                     | <mark>yes</mark> : date<br>05/04/2018    | yes: date                                   | yes: date  |
| WELD 270B                      | <mark>yes</mark> / no | no /                          | no /                                     | no /  | no /   |
|                                |                       | yes: date                     | <mark>yes</mark> : date<br>05/04/2019    | yes: date                                   | yes: date  |

| WELD 270C | <mark>yes</mark> / no | no /      | no /                                  | <mark>no</mark> / | no /      |
|-----------|-----------------------|-----------|---------------------------------------|-------------------|-----------|
|           |                       | yes: date | <mark>yes</mark> : date<br>05/04/2018 | yes: date         | yes: date |
| WELD 273  | <mark>yes</mark> / no | no /      | no /                                  | <mark>no</mark> / | no /      |
|           |                       | yes: date | <mark>yes</mark> : date<br>05/04/2018 | yes: date         | yes: date |

| WELD 275  | <mark>yes</mark> / no | <mark>no</mark> /                     | no /                                  | <mark>no</mark> / | <mark>no</mark> / |
|-----------|-----------------------|---------------------------------------|---------------------------------------|-------------------|-------------------|
|           |                       | yes: date                             | <mark>yes</mark> : date<br>05/04/2018 | yes: date         | yes: date         |
| WELD 276  | <mark>yes</mark> / no | no /                                  | no /                                  | <mark>no</mark> / | no /              |
|           |                       | yes: date                             | yes:<br>date05/04/2018                | yes: date         | yes: date         |
| WELD 277  | <mark>yes</mark> / no | no /                                  | no /                                  | <mark>no</mark> / | no /              |
|           |                       | yes: date                             | yes: date<br>05/04/2018               | yes: date         | yes: date         |
| WELD 280A | <mark>yes</mark> / no | no /                                  | no /                                  | no /              | no /              |
|           |                       | yes: date                             | yes: date                             | yes: date         | yes: date         |
| WELD 280B | <mark>yes</mark> / no | no /                                  | no /                                  | no /              | no /              |
|           |                       | yes: date                             | yes: date                             | yes: date         | yes: date         |
| WELD 770A | <mark>yes</mark> / no | no /                                  | no /                                  | no /              | no /              |
|           |                       | yes: date<br>05/04/2018               | yes: date                             | yes: date         | yes: date         |
| WELD 770B | <mark>yes</mark> / no | no /                                  | no /                                  | no /              | no /              |
|           |                       | <mark>yes</mark> : date<br>05/04/2018 | yes: date                             | yes: date         | yes: date         |
| WELD 780A | <mark>yes</mark> / no | no /                                  | no /                                  | no /              | no /              |
|           |                       | <mark>yes</mark> : date<br>05/04/2018 | yes: date                             | yes: date         | yes: date         |

b. For all Currently Active Programs/Certificates, review the CurricUNET "Program of Study" outline for each active program/certificate and complete the table by indicating yes/no for each column.

## **Programs:**

| Program / Certificate<br>Title         | Currently<br>active   | New program<br>since last<br>CPPR          | Program<br>modification<br>since last<br>CPPR | Deactivated since last CPPR |
|--|-----------------------|--|---|-----------------------------|
| Welding Technology<br>AS               | <mark>yes</mark> / no | no /<br>yes: date                          | no /<br>yes: date                             | no /<br>yes: date           |
| Welding Technology<br>CA               | <mark>yes</mark> / no | no /<br>yes: date                          | no /<br>yes: date                             | no /<br>yes: date           |
| Welding Technology Structural Steel CS | <mark>yes</mark> / no | no /<br>yes: date                          | no /<br>yes: date                             | no /<br>yes: date           |
| Welding Technology Pipe CS             | <mark>yes</mark> / no | no /<br>yes: date                          | no /<br>yes: date                             | no /<br>yes: date           |
| Noncredit Structural<br>Steel CS       | yes / <mark>no</mark> | no /<br><mark>yes</mark> : date<br>Pending | no /<br>yes: date                             | no /<br>yes: date           |

## **Program Review:**

| Currently active Program / Certificate: Title | Required courses and electives, incl. course numbers, course titles, and course credits, are accurate | Program<br>description is<br>current | Program Learning Outcomes are accurate and include method of assessment |
|---|---|--------------------------------------|---|
| Welding Technology AS                         | yes / <mark>no</mark> *   | yes / <mark>no</mark> *              | yes / <mark>no</mark> **  |
| Welding Technology CA                         | yes / <mark>no</mark> *   | yes / <mark>no</mark> *              | yes / <mark>no</mark> **  |

| Welding Technology  | yes / <mark>no</mark> * | yes / <mark>no</mark> * | yes / <mark>no</mark> ** |
|---------------------|-------------------------|-------------------------|--------------------------|
| Structrual Steel CS |                         |                         |                          |
|                     |                         |                         |                          |
| Welding Technology  | yes / <mark>no</mark> * | yes / <mark>no</mark> * | yes / <mark>no</mark> ** |
| Pipe CS             |                         |                         |                          |
| Noncredit Structual | yes / no*               | yes / <mark>no</mark> * | yes / <mark>no</mark> ** |
| Steel CS            |                         |                         |                          |
|                     |                         |                         |                          |

<sup>\*</sup> If not, program modification is needed.

#### B. Curriculum Review

Complete the Curriculum Review Worksheet (<u>download from this folder</u>) and submit the form with your CPPR.

Based on information that you enter, the template will create a 5-year calendar for your program to follow during which any modifications to the Course Outline of Record determined during the curriculum review.

What is the purpose of the worksheet? Completing the worksheet provides evidence that the curriculum (including course delivery modalities) have been carefully reviewed during the past five years for currency in teaching practices, compliance with current policies, standards, regulations, and with advisory committee input. The form requires you to include evidence that you have reviewed that the entries on the course outline of record (CurricUNET format) are appropriate and complete.

The review sheet will be attached to the end of the report as directed

<sup>\*\*</sup> If not, Program Learning Outcomes modification is needed

## VI. PROGRAM OUTCOMES, ASSESSMENT AND IMPROVEMENTS

A. Attach or insert the assessment calendar for your program for the next program review cycle.

## B. <u>5-Year Cycle Calendar Courses:</u>

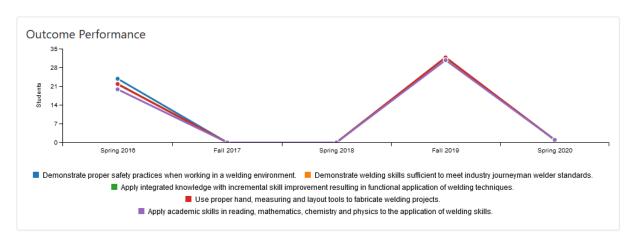
| Course    | Fall | Spring  | Fall    | Spring  | Fall    | Spring  | Fall    | Spring  | Fall    | Spring  |
|-----------|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Number    |      | 2023    | 2023    | 2024    | 2024    | 2025    | 2025    | 2026    | 2026    | 2027    |
| WELD 101  |      | major / |
|           |      | minor   |
| WELD 252  |      | major / |
|           |      | minor   |
| WELD 270A |      | major / |
|           |      | minor   |
| WELD 270B |      | major / |
|           |      | minor   |
| WELD 270C |      | major / |
|           |      | minor   |
| WELD 273  |      | major / |
|           |      | minor   |
| WELD 275  |      | major / |
|           |      | minor   |
| WELD 276  |      | major / |
|           |      | minor   |
| WELD 277  |      | major / |
|           |      | minor   |
| WELD 280A |      | major / |
|           |      | minor   |

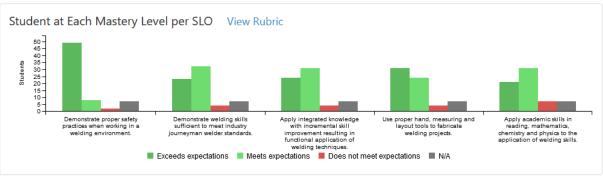
| WELD 280B | major /            |
|-----------|---------|---------|---------|---------|---------|---------|---------|---------|--------------------|
|           | minor              |
| WELD 770A | major /            |
|           | minor              |
| WELD 770B | major /            |
|           | minor   | <mark>minor</mark> |
| WELD 780A | major /            |
|           | minor              |

C. Have you completed all course assessments in eLumen? If no, explain why you were unable to do so during this program review cycle and what plan(s) exist for completing this in the next program review cycle.

Welding Program is behind on entering data into eluman. Several part time instructors on a temperory hire did not complete the assessment and unable to acess the data to insert for them.

D. Include the most recent "PLO Summary Map by Course" from eLumen which shows the Course-level SLOs mapped to the Program-level SLOs.





#### Outcome Performance Term by Term

|   | Spring 2016 Fall 2017 |                       |                                  |     |                      |                    | Spring 2018                      |     |                      |                       |
|---|-----------------------|-----------------------|----------------------------------|-----|----------------------|--------------------|----------------------------------|-----|----------------------|-----------------------|
| Outcome   | Exceeds expectations  | Meets<br>expectations | Does not<br>meet<br>expectations | N/A | Exceeds expectations | Meets expectations | Does not<br>meet<br>expectations | N/A | Exceeds expectations | Meets<br>expectations |
| Demonstrate proper safety practices when working in a welding environment.  | 18                    | 6                     | 0                                | 2   | 0 _                  | 0 -                | 0 _                              | 0 - | 0 -                  | 0 _                   |
| Demonstrate welding skills sufficient to meet industry journeyman welder standards.   | 8                     | 14                    | 2                                | 2   | 0 _                  | 0 _                | 0                                | 0   | 0 _                  | 0 -                   |
| Apply integrated knowledge with<br>incremental skill improvement<br>resulting in functional application<br>of welding techniques. | 8                     | 14                    | 2                                | 2   | 0 _                  | 0 _                | 0 _                              | 0 - | 0 _                  | 0 _                   |
| Use proper hand, measuring and layout tools to fabricate welding projects.  | 8                     | 14                    | 2                                | 2   | 0                    | 0 _                | 0_                               | 0   | 0 _                  | 0 _                   |
| Apply academic skills in reading,<br>mathematics, chemistry and<br>physics to the application of<br>welding skills.               | 5                     | 15                    | 4                                | 2   | 0 _                  | 0 _                | 0 _                              | 0 - | 0 _                  | 0 _                   |
| <   |                       |                       |                                  |     |                      |                    |                                  |     |                      | >                     |

#### Assessment Rubric View Rubric

|   | Exceeds expectations | Me<br>expec | ets<br>tations | me | s not<br>eet<br>tations |     |
|---|----------------------|-------------|----------------|----|-------------------------|-----|
| Outcome   | 5                    | 4           | 3              | 2  | 1                       | N/A |
| Demonstrate proper safety practices when working in a welding environment.          | 49                   | 7           | 1              | 0  | 2                       | 7   |
| Demonstrate welding skills sufficient to meet industry journeyman welder standards. | 23                   | 24          | 8              | 1  | 3                       | 7   |

## Include the most recent "ILO Summary Map by Course" from eLumen that shows the Course-level SLOs mapped to the Institutional Learning Outcomes.

Cuesta College

#### ILO/PLO Summary Map by Course/Context

Map Origin: Courses for Welding

Map Target: All ILOs

|              |      | Artistic and Cultural Kno   | wledge and Engagement  | Critical Thinking a   | nd Communication  | Personal, Academic, and<br>Professional Development  |  |
|--------------|------|---|--|---|---|--|--|
| li<br>Course | lLOs | Identify, create, or critique key<br>elements of inspirational art<br>forms | Demonstrate knowledge of and<br>sensitivity to diverse groups and<br>cultures through studying the<br>world's languages, societies,<br>and histories | Analyze and evaluate their own thinking processes and those of others | Communicate and interpret complex information in a clear, ethical, and logical manner | Recognize, assess, and<br>demonstrate the skills and<br>behaviors that promote<br>academic and professional<br>development |  |
| WELD101      |      |   |  |   |   |  |  |
| WELD175      |      |   |  |   |   | 4  |  |
| WELD176      |      |   |  |   |   | 4  |  |
| WELD247      |      |   |  |   |   |  |  |
| WELD270A     |      |   |  |   |   | 4  |  |
| WELD270B     |      |   |  |   |   | 4  |  |
| WELD270C     |      |   |  |   |   | 3  |  |
| WELD273      |      |   |  |   |   | 2  |  |
| WELD275      |      |   |  |   |   |  |  |
| WELD276      |      |   |  |   |   |  |  |
| WELD277      |      |   |  |   |   | 4  |  |
| WELD280A     |      | ·   |  |   |   | 4  |  |
| WELD280B     |      |   |  |   |   | 3  |  |
| WELD770A     |      |   |  |   |   |  |  |
| WELD770B     |      |   |  |   |   |  |  |
| WELD780A     |      |   |  |   |   |  |  |
|              |      |   |  |   |   | 32   |  |

E. Highlight changes made at the course or program level that have resulted from SLO assessment. Please include the evidence of dialog that prompted these changes.

Prior to Rob Thorsen retirement. The Slo's were reworked and processed through Cricunet as an update. These SlO's were reviewed by the advisory committee ans accepted prior to entering them in the system.

F. Identify and describe any budget or funding requests that are related to student learning outcome assessment results. If applicable, be sure to include requests in the Resource Plan Worksheet (download from this folder) and review the Resource Allocation Rubric.

No requests at the time of this review

#### VII. PROGRAM DEVELOPMENT

Indicate how the program supports efforts to achieve any of the following:

A. Institutional Goals and Objectives

None at this time

B. Institutional Learning Outcomes

None at this time

C. Program outcomes

Seek out input from our Advisory Committee to keep our program Slo's current with industry needs

Indicate any anticipated changes in the following areas:

A. Curriculum and scheduling

Possible restructuring of WELD 270 lecture lab combo to a model that incorporates one large lecture and several lab sections in order to attempt to raise efficiency rates.

B. Support services to promote success, persistence and retention

Continued use of our CTE Resource Specialist which involves assisting students, who qualify for program certificates, fill out the applications and file them with the records office. This has been very effective in the past and we hope to continue to raise the number odf awards granted.

#### C. Facilities needs

On-going equipment repair and replacement-SLOC \$30,000/yr
 Cover compound are adjacent to weld lab – SLOC \$50000.00
 New 3/8" Plate Shear – SLOC \$30000.00

- Increase welding budget to reflect the current rise in steel and gas costs at the current rate of inflation.
- The retrofit of the welding department fume exaust system is not up to industry standards for cubic feet per minute removal from each welding booth. The original request was to replicate the exaust system installed in the Paso Robles High School Ag Shop for 800 SCH air removal. The installed

system is currently 350 CFM with 4 inch snorkel heads. The 3 exaust fans are running at 100% and all the computer controlled systems for the varible frequency drives are bypassed. The lab under full booth welding usage is unable to remove the welding fumes.

- D. Staffing needs/projections
- Hire 1-2 new PT faculty to replace PT's that have retired or to keep a working pool
  of instructors.
- Replace Rob Thorsen the other full time instructure that retired due to a medical condition.

Lastly, address any changes in strategy in response to the predicted budget and FTES target for the next program review cycle.

The local industry provides jobs for our students, our welders that receive an AWS certification are able to do code quality work. As we currently keep our building cycle active we will have the ability to fill our class load. The second factor is the undergrad work done with Cal Poly and their programs.

#### VIII. END NOTES

If applicable, you may attach additional documents or information, such as awards, grants, letters, samples, lists of students working in the field, etc.

The welding department maintains an aggressive year round recruitment effort utilizing the Mobile Welding Lab. Additional efforts include hosting the California State FFA Ag Welding competition in May for the last 11 years, as well as extremely successful involvement at the Regional, State and National levels of Skill USA.

IX. After completing and submitting this document, please complete the <u>Overall Program</u>
<u>Strength and Ongoing Viability Assessment</u> with your Dean before May 12, 2023.

#### SIGNATURE PAGE

Faculty, Director(s), Manager(s), and/or Staff Associated with the Program

Instructional Programs: All full-time faculty in the program must sign this form. If needed, provide an extra signature line for each additional full-time faculty member in the program. If there is no full-time faculty associated with the program, then the part-time faculty in the program should sign. If applicable, please indicate lead faculty member for program after printing his/her name.

Instructional Programs: All full-time director(s), managers, faculty and/or classified staff in the program must sign this form. (More signature lines may be added as needed.)

| John Stokes                         |           |      |
|-------------------------------------|-----------|------|
| Division Chair/Director Name        | Signature | Date |
| Oscar Ramos                         |           |      |
| Name                                | Signature | Date |
| Mike Fontes (Mar 8, 2023 09:10 PST) |           |      |
| Name                                | Signature | Date |
|                                     |           |      |
| Name                                | Signature | Date |
|                                     |           |      |
| Name                                | Signature | Date |
|                                     |           |      |
| Name                                | Signature | Date |
|                                     |           |      |
| Name                                | Signature | Date |
|                                     |           |      |

## **SUPPLEMENTAL DOCUMENTS**

## FACULTY HIRING PRIORITIZATION INFORMATION (IF APPLICABLE)

If your program requested a faculty position for consideration, please attach or embed the following worksheets that were presented to the College Council. The guidelines for faculty prioritization can be found here: Faculty Prioritization Process Handbook

| APPLICABLE SIGNATURES:   |      |  |  |  |  |
|--|------|--|--|--|--|
| Oscar Ramos  |      |  |  |  |  |
| Vice President/Dean  | Date |  |  |  |  |
| John Stokes  |      |  |  |  |  |
| Division Chair/Director/Designee   | Date |  |  |  |  |
| Mike Fontes (Mar 8, 2023 09:10 PST)  |      |  |  |  |  |
| Other (when applicable)  | Date |  |  |  |  |
|  |      |  |  |  |  |
|  |      |  |  |  |  |
| The above-signed individuals have read and discussed this review. The Director/Coordinator, Faculty, and staff in the program involved in the preparation of the CPPR acknowledge the receipt of a copy of the Vice President/ Dean's narrative analysis. The signatures do not necessarily signify agreement. |      |  |  |  |  |
|  |      |  |  |  |  |
|  |      |  |  |  |  |
|  |      |  |  |  |  |

#### 2023 INSTRUCTIONAL ANNUAL PROGRAM PLANNING WORKSHEET

CURRENT YEAR: 2022 TO 2023 PROGRAM: WELDING TECHNOLOGY

CLUSTER: WORK FORCE ECONOMIC DEVELOPMENT LAST YEAR CPPR COMPLETED: 2022-23

NEXT SCHEDULED CPPR: 2023 CURRENT DATE: 3/2/2023

The Annual Program Planning Worksheet (APPW) is the process for:

- reviewing, analyzing and assessing programs on an annual basis
- documenting relevant program changes, trends, and plans for the upcoming year
- identifying program needs, if any, that will become part of the program's resource plan
- highlighting specific program accomplishments and updates since last year's APPW
- tracking progress on a Program Sustainability Plan if established previously

Note: Degrees and/or certificates for the *same* program *may be consolidated* into one APPW.

This APPW encompasses the following degrees and/or certificates:

AS degree in Welding Technology, CA of Achievement in Welding Technology, Certificate of Specialization (CS) in Welding Technology

#### **GENERAL PROGRAM UPDATE**

Describe significant changes, if any, to program mission, purpose or direction. *If there are not any, indicate: NONE.* 

NONE

#### PROGRAM SUSTAINABILITY PLAN UPDATE

Was a Program Sustainability Plan established in your program's most recent Comprehensive Program Plan and Review?

| Yes | $\ensuremath{	extstyle 	extstyle 	extstyle }$ If yes, please complete the Program Sustainability Plan Progress Report below |
|-----|---|
| No  | If no, you do not need to complete a Progress Report.   |

If you selected yes, please complete the Program Sustainability Plan Progress Report below after you complete the Data Analysis section. That data collection and analysis will help you to update, if necessary, your Program Sustainability Plan.

#### DATA ANALYSIS AND PROGRAM-SPECIFIC MEASUREMENTS

Your responses to the prompts for the data elements below should be for the entire program. If this APPW is for multiple degrees and/or certificates, then you MAY want to comment on each degree and/or certificate or discuss them holistically for the entire program being sure to highlight relevant trends for particular degrees and/or certificates if necessary. Responses in this document need only reference the most recent year's available data.

## A. General Enrollment (Insert Aggregated Data Chart)

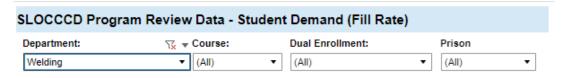


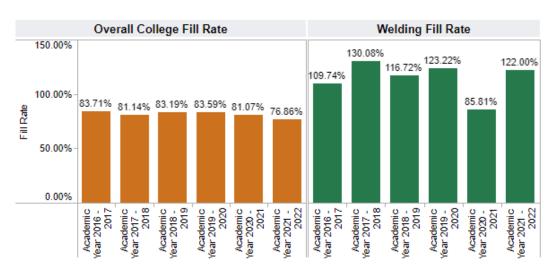
Enrollment: Duplicated count of students who completed greater than 0 units in positive attendance courses or were present on census for all other accounting methods.

#### Enrollment increase after Covid

2 San Luis Obispo County Community College District Instructional Annual Program Planning Worksheet Approved by Academic Senate April 28, 2017 Document to be Used for Submission Spring, March 7, 2022

## B. General Student Demand (Fill Rate) (Insert Aggregated Data Chart)





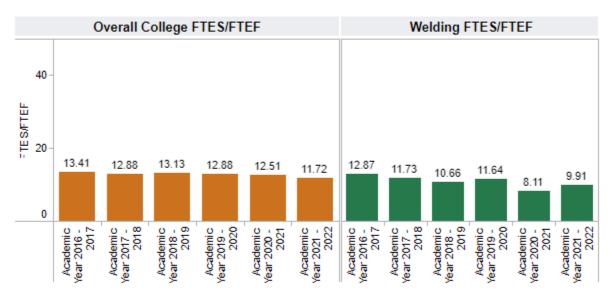
Fill Rate: The ratio of enrollments to class limits. Cross listed class limits are adjusted appropriately.

Also, courses with zero class limits are excluded from this measure.

Welding above college fill rate.

C. General Efficiency (FTES/FTEF) (Insert Aggregated Data Chart) Insert the data chart and explain observed differences between the program and the college.

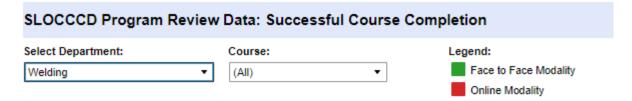


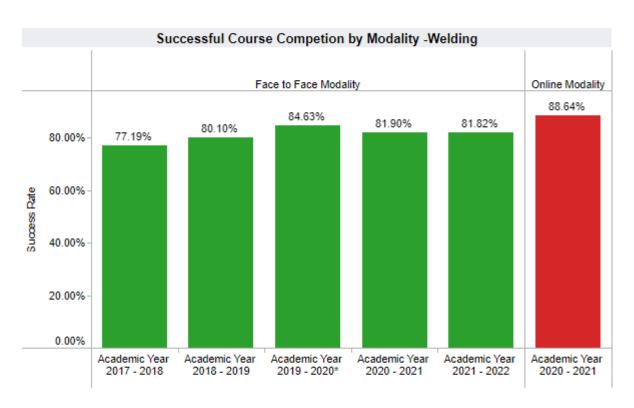


FTES/FTEF: The ratio of total FTES to Full-Time Equivalent Faculty (SXD4 Total-Hours/17.5)/XE03 FACULTY-ASSIGNMENT-FTE)

The efficiency has been lowered to  $9.91\,\%$  due to lower enrollment and fill rates related to the spring back from Covid

D. Student Success—Course Completion by Modality (Insert Data Chart) Insert the data chart and explain observed differences between the program and the college.

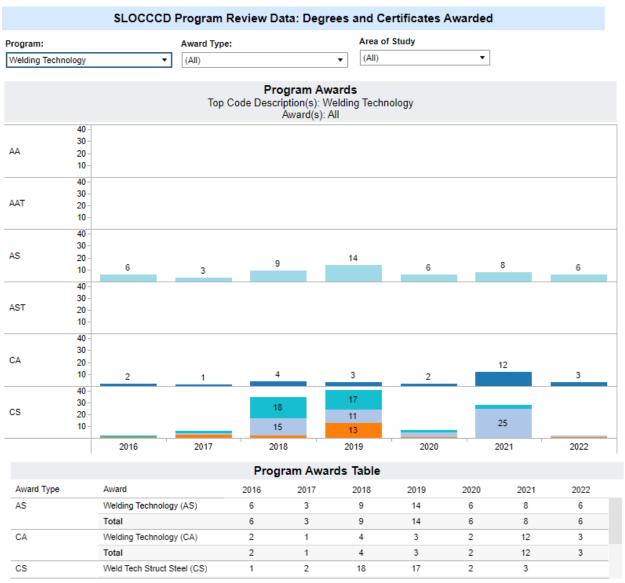




| Successful Course Competion by Modality Table - Welding |                              |                                 |                                 |                                  |                                 |                                 |
|---|------------------------------|---------------------------------|---------------------------------|----------------------------------|---------------------------------|---------------------------------|
|   |                              | Academic<br>Year 2017 -<br>2018 | Academic<br>Year 2018 -<br>2019 | Academic<br>Year 2019 -<br>2020* | Academic<br>Year 2020 -<br>2021 | Academic<br>Year 2021 -<br>2022 |
| Face to Face<br>Modality                                | Department Success Rate      | 77.19%                          | 80.10%                          | 84.63%                           | 81.90%                          | 81.82%                          |
|   | Total Department Enrollments | 640.0                           | 605.0                           | 665.0                            | 317.0                           | 697.0                           |
| Online Modality   | Department Success Rate      |                                 |                                 |                                  | 88.64%                          |                                 |
|   | Total Department Enrollments |                                 |                                 |                                  | 44.0                            |                                 |

Face to Face Modality has reminded relatively the same for the past 3 years.

E. Degrees and Certificates Awarded (Insert Data Chart) Insert the data chart and explain observed differences between the program and the college.



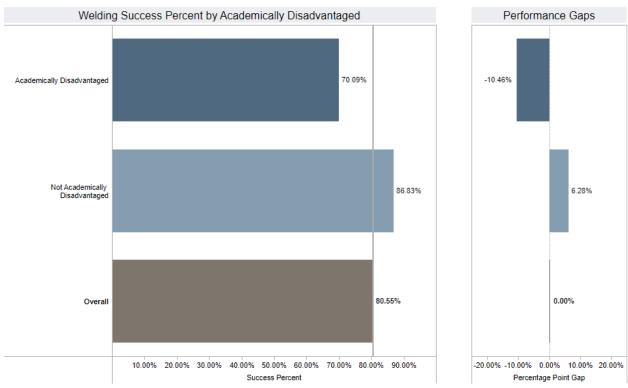
Program Awards: The number of degress and certificates awarded by program type

Over the past 4 years, the welding program has been strengthening in both certificates and awarded degrees

F. General Student Success – Course Completion (Insert Aggregated Data Chart) Insert the data chart and explain observed differences between the program and the college.



## Successful Course Completion by Student Subpopulation



Note: Successful Course Completion is the ratio of enrollments resulting in a final grade of A, A-, B+, B, B-, C+, C, CR or P to all valid grades.

The success rate is consistent with the schools wide trend over the past 5 years

**Disaggregated Student Success** No comments at this time

## OTHER RELEVANT PROGRAM DATA (OPTIONAL)

Provide and comment on any other data that is relevant to your program such as state or national certification/licensure exam results, employment data, etc. If necessary, describe origin and/or data collection methods used.

#### PROGRAM OUTCOMES ASSESSMENT CHECKLIST AND NARRATIVE

| CH          | ECKLIST:   |
|-------------|--|
| $\boxtimes$ | SLO assessment cycle calendar is up to date.                           |
|             | All courses scheduled for assessment have been assessed in eLumen.     |
|             | Program Sustainability Plan progress report completed (if applicable). |
|             |  |

**NARRATIVE: NONE NOTED** 

## PROGRAM PLANNING / FORECASTING FOR THE NEXT ACADEMIC YEAR

Briefly describe any program plans for the upcoming academic year. These may include but are not limited to the following: (Note: you do not need to respond to each of the items below). If there are no forecasted plans for the program, for the upcoming year, indicate: NONE.

- A. New or modified plans for achieving program-learning outcomes None noted
- B. Anticipated changes in curriculum, scheduling or delivery modality None noted
- C. Levels, delivery or types of services None noted
- D. Facilities changes None noted
- E. Staffing projections for a full-time replacement for Rob Thorsen in process this school year. We have a need for a Certified Welding Inspector or a Certified Welding Educator to assist in providing AWS welding certifications
- F. Current full time instructor Mike Fontes, is responsible for 7 dual enrollment classes and 10 college classes and workload exceeds job requirments.

#### PROGRAM SUSTAINABILITY PLAN PROGRESS REPORT

This section only needs to be completed if a program has an existing Program Sustainability Plan. Indicate whether objectives established in your Program Sustainability Plan have been addressed or not, and if improvement targets have been met.

| Area of Decline or<br>Challenge | Identified Objective<br>(Paste from PSP) | Planning Steps<br>(Check all that apply) | Has the<br>Improvement<br>Target Been |
|---------------------------------|--|--|---------------------------------------|
| Chanenge                        | (raste nom rsr)                          | (Check all that apply)                   | Met?                                  |
|                                 |  | □ Identified                             |                                       |
| Enrollment                      |  | ☐ Resources Allocated                    | Select one                            |
|                                 |  | ☐ Implemented                            |                                       |
| Student Demand                  |  | ☐ Identified                             |                                       |
| (Fill Rate)                     |  | ☐ Resources Allocated                    | Select one                            |
| (Till Nate)                     |  | ☐ Implemented                            |                                       |
| Efficiency                      |  | ☐ Identified                             |                                       |
| (FTES/FTEF)                     |  | ☐ Resources Allocated                    | Select one                            |
| (1123/1121)                     |  | ☐ Implemented                            |                                       |
| Student Success –               |  | $\square$ Identified                     |                                       |
| Course Completion               |  | ☐ Resources Allocated                    | Select one                            |
| course completion               |  | ☐ Implemented                            |                                       |
| Student Success —               |  | $\square$ Identified                     |                                       |
| Course Modality                 |  | ☐ Resources Allocated                    | Select one                            |
| Course Wiodality                |  | ☐ Implemented                            |                                       |
| Degrees and                     |  | ☐ Identified                             |                                       |
| Certificates                    |  | ☐ Resources Allocated                    | Select one                            |
| Awarded                         |  | ☐ Implemented                            |                                       |

If Program Sustainability Plan is still necessary, provide a brief description of how you plan to continue your PSP and update your PSP to remove any objectives that have been addressed and include any new objectives that are needed.

## CPPR Welding 2023

Final Audit Report 2023-04-19

Created: 2023-03-08

By: Tiffanie Kerr (tiffanie\_kerr@cuesta.edu)

Status: Signed

Transaction ID: CBJCHBCAABAA5WTh9qENmV4zAbQ282mGStlyGxw1Dxfw

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