

Santa Rosa Junior College

Program Resource Planning Process

Welding 2019

1.1a Mission

The mission of the Welding Technology program is to provide entry-level training to students interested in entering the Welding and Welding related industries.

There is a great demand for welders in the commercial plumbing industry, and in the construction trades. There is also a small segment of the population that does ornamental welding for cosmetic applications like gates, and metal sculptures.

We offer a learning environment that is open and affirming to all students, and our instructional programs are flexible to the needs of all students seeking training in their chosen occupational field. The Welding Technology program fosters a learning environment that allows each student to develop the necessary skills to achieve their educational goals. Our faculty provides instruction that reflects the latest demand from the industry partners in the trade.

1.1b Mission Alignment

The Welding Program is in alignment with the District's Mission. We benefit the community we serve by: Increasing Knowledge, Improving Skills and Enhancing Lives. Our students go into society ready to work, earn a living and contribute to the community.

1.1c Description

The Welding Tech Program offers day and evening classes which lead to a Certificate in Welding Technology. This certificate series of classes provides the student with a general education in welding theory, AWS (American Welding Society) standards, and the various application of the number of welding techniques and materials used in the trade.

The student can choose to complete the certificate in 2, 3, 4 or semesters. The program also offers evening classes that provide continuous training opportunities for day certificate students and students working in the Welding industry.

To better serve the needs of our diverse student body, the Welding Technology Program is planning to create a number of skill certificates in the particular areas of specialization. These certificates will be aligned with AWS training criteria, which means that they meet current industry standards. The certificates also give students a document of training verification and recognition that may be helpful in a job application process or to obtain a pay increase in an existing job. Many of our students, who do not have time to complete the full Welding Technology certificate, will find these certificates useful.

1.1d Hours of Office Operation and Service by Location

In order to reach as many students as possible, the Automotive, Diesel, Welding and Machine Tool programs offer day and evening classes (although the current budget climate precludes the offering of most evening classes).

The service center is located in the Lounibos Center Bldg. the administrative office hours are 9 am to 1pm Monday through Thursday. The service center serves the Automotive, Diesel, Welding and Machine Tool Programs.

The Welding Program shop area is open when classes are in session.

1.2 Program/Unit Context and Environmental Scan

WELDING:

With the reduction in construction and manufacturing jobs, due to the economy, welding positions have declined. Jobs are not as plentiful as in the past few years. However, employers who are in need of qualified employees continue to contact the SRJC Welding program due to the reputation of the program in training welders.

Even with the overall decline in construction jobs there are pockets of the industry that are booming, and these include areas that require some sort of welding applications. The demand for the welding program has not decreased. In fact it may have increased. The students see the possibility of employment in the welding industry better than many other areas. Also, it is anticipated that growth in "green" construction will bring new employment opportunities for individuals with welding skills. The AWS Certifications that SRJC has been doing for students since 1972 is the single most important requirement related to the program. SRJC's welding program coordinator has a very close relationship with the majority of employers locally which puts us first in line for the job market. Few of our students transfer to other institutions. Accordingly, industry support continues to be positive with donations to the program, e.g. metal, welding rods, and small equipment.

2.1a Budget Needs

The cost of instructional material for the Welding program has increased dramatically. These include metal, welding rods, gases and other consumables needed to run the class. The students cannot be charged for these materials, so it is incumbent upon the program to provide these items to the students.

The equipment is aging; we need to replace our two shears as they barely cut anymore. Also, 7 of the 24 arc welders are dilapidated and in constant need of repair. These should be replaced.

Santa Rosa Junior College - Program Unit Review

Welding - FY 2017-18

2.1 Fiscal Year Expenditures

Santa Rosa Campus

Expenditure Category	Unrestricted Funds	Change from 2016-17	Restricted Funds	Change from 2016-17	Total	Change from 2016-17
Faculty payroll	\$89,027.30	2.96%	\$0.00	0.00%	\$89,027.30	2.96%
Adjunct payroll	\$68,339.14	21.05%	\$0.00	0.00%	\$68,339.14	21.05%
Classified payroll	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%
STNC payroll	\$857.50	-83.04%	\$0.00	0.00%	\$857.50	-83.04%
Student payroll	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%
Management payroll (and Dept Chairs)	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%
Benefits (3000's)	\$45,652.00	7.71%	\$0.00	0.00%	\$45,652.00	7.71%
Supplies (4000's)	\$31,247.73	1.04%	\$3,245.89	0.00%	\$34,493.62	11.53%
Services (5000's)	\$4,369.96	>1000%	\$0.00	0.00%	\$4,369.96	>1000%
Equipment (6000's)	\$0.00	0.00%	\$0.00	-100.00%	\$0.00	-100.00%
Total Expenditures	\$239,493.63	8.22%	\$3,245.89	-82.44%	\$242,739.52	1.23%

Expenditure Totals

Expenditure Category	Amount	Change from 2016-17	District Total	% of District Total
Total Expenditures	\$242,739.52	1.23%	\$154,788,480.66	0.16%
Total Faculty Payroll	\$157,366.44	10.11%	\$50,884,933.44	0.31%
Total Classified Payroll	\$0.00	0.00%	\$22,270,301.15	0.00%
Total Management Payroll	\$0.00	0.00%	\$10,134,908.88	0.00%
Total Salary/Benefits Costs	\$203,875.94	7.10%	\$111,941,187.45	0.18%
Total Non-Personnel Costs	\$38,863.58	-21.36%	\$16,406,746.64	0.24%

2.1b Budget Requests

Rank	Location	SP	M	Amount	Brief Rationale
0001	ALL	02	01	\$10,000.00	Rising cost of consumables such as metal welding rods and gases used to operate the class.

2.2a Current Classified Positions

Position	Hr/Wk	Mo/Yr	Job Duties
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2.2b Current Management/Confidential Positions

Position	Hr/Wk	Mo/Yr	Job Duties
Department Chair	12.00	12.00	Evaluates faculty and staff, coordinates classes, reviews curriculum, on call for any problems. Trains new faculty, reviews and implements purchase orders, budget transfers, scheduling, and curriculum. Serves on department advisory committees (Machine, Automotive, Diesel, and Welding)

2.2c Current STNC/Student Worker Positions

Position	Hr/Wk	Mo/Yr	Job Duties
The department has no student or STNC workers	0.00	0.00	Although there are no student or STNC workers at the present time, the department feels there is a need and will be requesting additional help. Welding has been borrowing STNC helpers from Machine Tool.

2.2d Adequacy and Effectiveness of Staffing

The cost of instructional materials for the Welding program has increased dramatically. These include metal, welding rods, gases and other consumables needed to run the class. The students cannot be charged for these materials, so it is incumbent upon the program to provide these items to the students.

The equipment is aging; we need to replace our two shears as they barely cut anymore. Also, 7 of the 24 arc welders are dilapidated and in constant need of repair. These should be replaced.

The welding program has no support positions, but there is a great need for help. Currently, the faculty spends about 45 minutes prior to each class cutting metal for the labs. Also, routine cleaning/maintenance of the shop takes about 100 hours a semester. This involves dismantling, cleaning, and reassembly of machines. Currently the full time faculty member is doing this on his own time.

We are requesting an STNC for 14 to 20 hours a week (238 to 340 hours a semester) to help with these duties.

Santa Rosa Junior College - Program Unit Review

Welding - FY 2017-18

2.2 Fiscal Year Employee Data and Calculations

Employee Head Counts

Employee Category	Count	Change from 2016-17	District Total	% of District Total
Contract Faculty	1	0.00%	317	0.32%
Adjunct Faculty	5	0.00%	1352	0.37%
Classified Staff	0	0.00%	525	0.00%
STNC Workers	1	0.00%	427	0.23%
Student Workers	0	0.00%	506	0.00%
Mgmt/Admin/Dept Chair	0	0.00%	170	0.00%

Employee FTE Totals

FTE Category	FTE	Change from 2016-17	District Total	% of District Total
FTE-F - Faculty	3.2340	14.61%	726.9903	0.44%
FTE-CF - Contract Faculty	1.0000	0.00%	314.0788	0.32%
FTE-AF - Adjunct Faculty	2.2340	22.64%	412.9115	0.54%
FTE-C - Classified	0.0000	0.00%	446.6005	0.00%
FTE-ST - STNC	0.0337	-83.72%	41.0691	0.08%
FTE-SS - Support Staff	0.0337	-83.72%	648.5309	0.01%
FTE-SW - Student Workers	0.0000	0.00%	160.8613	0.00%
FTE-M - Management	0.0000	0.00%	119.8350	0.00%
FTE-DC - Department Chairs	0.0000	0.00%	0.0000	0.00%

Student Data

Data Element	Value	Change from 2016-17	District Total	% of District Total
FTES-CR - Credit	61.0362	9.25%	14738.9657	0.41%
FTES-NC - Non-Credit	0.0000	0.00%	2075.9009	0.00%
FTES - combined	61.0362	9.25%	16814.8666	0.36%
Students Enrolled/Served	322	-18.27%	30000	1.07%

Calculations

Data Element	Value	Change from 2016-17	District Total	% of District Total
FTE-S : FTE-F	18.8734	-4.68%	23.1294	81.60%
FTE-AF : FTE-CF	2.2340	22.64%	1.3147	169.93%
FTE-F : FTE-SS	96.0956	604.06%	1.1210	>1000%
FTE-F : FTE-M	0.0000	0.00%	6.0666	0.00%
FTE-SS : FTE-M	0.0000	0.00%	5.4119	0.00%
FTE-ST : FTE-C	0.0000	0.00%	0.0920	0.00%
Average Faculty Salary per FTE-F	\$48,660.21	-3.93%	\$69,993.96	69.52%
Average Classified Salary per FTE-C	\$0.00	0.00%	\$49,866.27	0.00%
Average Management Salary per FTE-M	\$0.00	0.00%	\$84,573.86	0.00%
Salary/Benefit costs as a % of total budget	83.99%	5.79%	72.32%	116.14%
Non-Personnel \$ as a % of total budget	16.01%	-22.32%	10.60%	151.05%
Restricted Funds as a % of total budget	1.34%	-82.66%	17.08%	7.83%
Total Unit Cost per FTE-F	\$75,058.93	-11.67%	\$212,916.84	35.25%
Total Unit Cost per FTE-C	\$0.00	0.00%	\$346,592.72	0.00%
Total Unit Cost per FTE-M	\$0.00	0.00%	\$1,291,680.07	0.00%
Total Unit Cost per FTE-S	\$3,976.98	-7.34%	\$9,205.45	43.20%
Total Unit Cost per student served/enrolled	\$753.85	23.87%	\$5,159.62	14.61%

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Welding - FY 2017-18

2.2a Classified Positions Employees paid from a Classified OBJECT code

Name Last	First	Position	Hours	FTE
<< No Employees >>				

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2.2b Management/Confidential Positions Employees paid from a Management/Confidential OBJECT code

Name Last	First	Position	Hours	FTE
<< No Employees >>				

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Welding - FY 2017-18

2.2c STNC Workers Employees paid from an STNC OBJECT code

Name Last	First	Position	Hours	FTE
Mogannam	Nicholas		70.00	0.0337
Totals			70.00	0.0337

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Welding - FY 2017-18

2.2d Student Employees Employees paid from a Student Employee OBJECT code

Name Last	First	Position	Hours	FTE
<< No Employees >>				

2.2e Classified, STNC, Management Staffing Requests

Rank	Location	SP	M	Current Title	Proposed Title	Type
0001	Santa Rosa	01	01	Lab Assistant	AAC voted to hiring (2) 50% lab asst. am and pm	Classified

2.3a Current Contract Faculty Positions

Position	Description
Welding Instructor/Program Coordinator	The full-time instructor has program coordination duties with disciplinary expertise in welding. Coordinates closely with Advisory Committees and industry associations. Involved with program and outreach responsibilities. Supervises adjunct instructors and coordinates faculty and equipment needs for the welding programs. Additionally has a welding shop to coordinate in order to effectively serve student needs.

2.3b Full-Time and Part-Time Ratios

Discipline	FTEF Reg	% Reg Load	FTEF Adj	% Adj Load	Description
Welding	1.0000	100.0000	0.8000	80.0000	

2.3c Faculty Within Retirement Range

Our one full time faculty is within or past retirement age.

2.3d Analysis of Faculty Staffing Needs and Rationale to Support Requests

The welding department needs more faculty to effectively train our students. Two additional adjunct or one full time faculty would be adequate.

During the Spring 2014 semester we hired two new adjunct welding instructors, and have a third that we are going to interview.

It is very difficult to find a welder talented enough to teach all aspects of welding at the college level, who also has a desire to (and is capable of) transmitting his/her talent to the students. The candidate is not only rare, but must also be pruned away from a career that is more lucrative than teaching.

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Welding - FY 2017-18

2.3a Contract Faculty Positions Employees paid from a Contract Faculty OBJECT code

Name Last	First	Position	Hours	HR FTE	DM FTE
Whitaker	Benjamin	Faculty	0.00	1.0000	0.0000
Totals			0.00	1.0000	0.0000

Santa Rosa Junior College - Program Unit Review

Welding - FY 2017-18

2.3b Adjunct Faculty Positions Employees paid from an Adjunct Faculty OBJECT code

Name Last	First	Position	Hours	FTE
Aschwanden	Daniel		140.00	0.2086
Diaz	Christopher		136.00	0.2086
Hong	Tom		140.00	0.2086
Whitaker	Benjamin		194.00	1.0000
Williams	Eric		184.00	0.6081
Totals			794.00	2.2340

2.3e Faculty Staffing Requests

Rank	Location	SP	M	Discipline	SLO Assessment Rationale
0001	ALL	02	01	Welding Technology	<p>Welding needs an additional contract faculty to adequately instruct our students! The welding departments SLOs revolve around technical skill in welding of all types. This faculty member would help impart to our students the skills that they need to attain all of our established SLOs.</p> <p>In addition he/she will be responsible for monitoring and improving our Student Learning Outcome system.</p> <p>In the past, our welding department employed two full time faculty. The student load is greater than ever, and we currently employ three adjunct instructors. Even with the help of these three instructors the classes are still overloaded, and shop safety would be enhanced by employing a second full time faculty and..</p>

2.4b Rationale for Instructional and Non-Instructional Equipment, Technology, and Software

A weather proof area needs to be created to protect valueable materials. This would consist of a new insulated roof to keep the roof from condasating and creating moisture inside. Also, placing plastic slats in the existing chainlink to keep the rain from entering the area would be necessary.

Helmets and face shields are needed for the students, they are expensive and wear out. The face shields and helmets speak directly to student safety. They get harder and harder to see through, making it near impossible for students to complete their work do to lack of vision. We keep 25 helmets in stock at \$100.00 each, and 14 googles @ \$50.00 each. The helmets and face shields have replacement lenses that should be changed out every semester and the helmets and face shields for should be replaced every other year . The replacement lenses for the helmets are \$3.00 and the replacement lenses for the face shields are \$15.00

We need to replace 3 Mig and 4 Tig welders. These are technically outdated and are in very poor operating condition which impacts the abilitiy to teach and stay up with current technology they also cost money and instructors time to repara and replace worn parts.

Pallet racks to organize and store materials, This will save time and materials, allowing for better student learning.

2.4c Instructional Equipment Requests

Rank	Location	SP	M	Item Description	Qty	Cost Each	Total Cost	Requestor	Room/Space	Contact
0001	Santa Rosa	01	01	Welding Machines MIG	4	\$15,000.00	\$70,000.00	B Whitaker		
0003	Santa Rosa	01	01	Welding Helmets	25	\$225.00	\$5,625.00	B Whitaker		Ben Whitaker
0004	Santa Rosa	01	01	Welding Machines TIG	4	\$15,000.00	\$70,000.00	B Whitaker		Ben Whitaker

2.4d Non-Instructional Equipment and Technology Requests

Rank	Location	SP	M	Item Description	Qty	Cost Each	Total Cost	Requestor	Room/Space	Contact
0000	ALL	00	00	No requests at this time.	0	\$0.00	\$0.00			

2.5a Minor Facilities Requests

Rank	Location	SP	M	Time Frame	Building	Room Number	Est. Cost	Description
0001	Santa Rosa	04	06	Urgent	Lounibos	2395	\$100,000.00	Weather proof and insulate bottle storage area and "carport" out back.
0001	Santa Rosa	01	01	Urgent	Lounibos	2395	\$32,000.00	Add LED lighting to the 12 ARC welding stations, for student safety. The inadequate lighting makes set up hard and creates a safety issue. The dust hog vents are currently blocking much of the needed lighting.
0001	Santa Rosa	02	06	Urgent	Lounibos	2395	\$1,000,000.00	Expand welding to double the available space for MIG & TIG weld stations
0001	Santa Rosa	04	06	Urgent	Lounibos	Entire Building	\$1,000,000.00	Roof is leaking causing water to drip into the welding booths creating a safety hazard for students and faculty.

2.5b Analysis of Existing Facilities

insulating and roofing the "carport" to the west of the shop would allow the space to become usable for much more than just storage. The space could be used much more efficiently than just for storage of old equipment etc.

The existing facilities are old and in need of painting and refurbishing. **It has been more than 30 years since the facility has been painted,** and any repairs that are performed are done so out of necessity to keep the program running. The faculty members do the best they can maintaining the equipment, but some of the older machines need to be replaced with machines currently used in the welding industry.

Lighting is an issue. The addition of a dust collector has severely diminished the lighting levels.

Welding cannot serve the number of students that want to learn welding due to very limited space. Welding needs to double the number of MIG and TIG stations to accommodate all the students who want to study at SRJC.

A separate subject is the safety issue raised by the cramped, limited floor space in the welding shop. In addition to adding square footage for additional welding stations, the welding shop needs to be increased in footprint size to safely train students in the inherently dangerous field of welding.

The roof is leaking in the shop causing water to drip into welding stations. This can become a big safety hazard. Students are welding with buckets catching the water next to them.

3.1 Develop Financial Resources

3.2 Serve our Diverse Communities

We hire through the SRJC Human Resources department using the standard recruitment methods.

We try to recruit both students and instructors from local businesses that service a wide demographic area. Also, Industrial and Trade Technology encourages faculty participation in classes and flex sessions (offered on or off campus) that broaden our staff's cultural awareness and sensitivity.

3.3 Cultivate a Healthy Organization

The Industrial and Trade Technology department supports the professional development of our classified staff by allowing them time during normal work hours to attend training sessions. These sessions are designed to train the employees in subject areas that allow them to better do their jobs. Examples of these subjects are: PRPP writing, CIS, forklift safety and operation, first-aid, CPR, and any other training applicable to their jobs.

3.4 Safety and Emergency Preparedness

Cliff Norton and Dave Yoast are safety leaders for the department.

3.5 Establish a Culture of Sustainability

We have new filters on our exhaust, helping reduce pollution created in the shop being venting into the environment.

We recycle all our metal, and other disposables.

4.1a Course Student Learning Outcomes Assessment

All courses in the welding curriculum are on a six year assessment cycle. During the six year cycle, at least on SLO will be assessed in each class. Please refer to the grid below to view our schedule and completions:

Welding Tech; Course SLO Assessment Six Year Cycle

Course	S2013	F2013	S2014	F2014
Weld 70 - Beginning Welding		X (SLO 1)		
Weld 171.1 - Advanced Shielded Metal Arc Welding			X (SLO 1)	
Weld 171.2 - Gas Metal Arc Welding & Gas Tungsten Arc Welding	X (SLO 1)			
Weld 171.3 - Flux Core Arc Wlding (FCAW)				X (SLO 1)
Weld 175A - Welding Technology 1				X (SLO 1)
Weld 175B - Welding Technology 2				X (SLO 1)
*Weld 98 - Independent Study in Welding				
Required Courses				
*Not Currently Offered				

X=SCHEDULED
X=COMPLETED

4.1b Program Student Learning Outcomes Assessment

The welding program has only one completion certificate. That certificate was assessed in Spring 2014, and was deemed successful (no changes needed).

At SRJC, our assessment cycle is that each certificate/major must be assessed at least once every six years. The next certificate assessment will be in Spring of 2017.

4.1c Student Learning Outcomes Reporting

Type	Name	Student Assessment Implemented	Assessment Results Analyzed	Change Implemented
Course	Weld70 - Beginning welding	Fall 2013	Fall 2013	N/A
Course	Weld171.1 -Advanced SMAW	Spring 2014	Spring 2014	N/A
Course	Weld171.2 Gas MAW & Gas TAW	Spring 2013	Spring 2013	N/A
Course	Weld171.3 FCAW	Fall 2014	Fall 2014	N/A
Course	Weld175A - Welding Tech1	Fall 2014	Fall 2014	N/A
Course	Weld175B - Welding Tech2	Fall 2014	Fall 2014	N/A
Certificate/Major	Welding Tech Certificate	Spring 2014	Spring 2014	N/A

4.2a Key Courses or Services that address Institutional Outcomes

Course/Service	1a	1b	1c	2a	2b	2c	2d	3a	3b	4a	4b	5	6a	6b	6c	7
weld70		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
weld70b	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
weld75a	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
weld75b	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

4.2b Narrative (Optional)

Welding has committed to assessing one course or certificate a semester. There are 8 courses and one certificate, allowing for a full rotation within the 6 year time frame.

5.0 Performance Measures

Not Applicable

5.1 Effective Class Schedule: Course Offerings, Times, Locations, and Delivery Modes (annual)

The WeldingTechnologydepartment offers both day and evening courses. We have not expanded to other campuses/sites as there are no shop facilities available at the present time, and budget constraints are dictating that we shrink our programs, not expand them.

We do not offer a distance learning component as all the current classes are hands on.
We would be better able to serve our students if we had more up-to-date equipment available.

Santa Rosa Junior College - Program Unit Review Welding - FY 2017-18 (plus current FY Summer and Fall)

5.1 Student Headcounts The number of students enrolled in each Discipline at first census (duplicated headcount).

Santa Rosa Campus

Discipline	X2015	F2015	S2016	X2016	F2016	S2017	X2017	F2017	S2018
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Welding	0	147	157	0	151	190	38	174	1
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Petaluma Campus (Includes Rohnert Park and Sonoma)

Discipline	X2015	F2015	S2016	X2016	F2016	S2017	X2017	F2017	S2018
Welding	0	0	0	0	0	0	0	0	0

Other Locations (Includes the PSTC, Windsor, and other locations)

Discipline	X2015	F2015	S2016	X2016	F2016	S2017	X2017	F2017	S2018
Welding	0	0	0	0	0	0	0	0	0

ALL Locations (Combined totals from ALL locations in the District)

Discipline	X2015	F2015	S2016	X2016	F2016	S2017	X2017	F2017	S2018
Welding	0	147	157	0	151	190	38	174	1

5.2a Enrollment Efficiency

Welding classes also fill very quickly (106%/85.5%), but capacity is limited to due work stations and facilities. Due to the current budget situation, it is not possible to open new sections.

Santa Rosa Junior College - Program Unit Review

Welding - FY 2017-18 (plus current FY Summer and Fall)

5.2a Enrollment Efficiency The percentage of seats filled in each Discipline at first census based on class limit (not room size).

Santa Rosa Campus

Discipline	X2015	F2015	S2016	X2016	F2016	S2017	X2017	F2017	S2018
Welding	0.0%	105.0%	112.1%	0.0%	107.9%	105.6%	95.0%	97.0%	113.0%

Petaluma Campus (Includes Rohnert Park and Sonoma)

Discipline	X2015	F2015	S2016	X2016	F2016	S2017	X2017	F2017	S2018
Welding	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Other Locations (Includes the PSTC, Windsor, and other locations)

Discipline	X2015	F2015	S2016	X2016	F2016	S2017	X2017	F2017	S2018
Welding	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

ALL Locations (Combined totals from ALL locations in the District)

Discipline	X2015	F2015	S2016	X2016	F2016	S2017	X2017	F2017	S2018
Welding	0.0%	105.0%	112.1%	0.0%	107.9%	105.6%	95.0%	97.0%	113.0%

5.2b Average Class Size

The Welding classes close before open registration, and remain close to class max size for the entire semester.

Santa Rosa Junior College - Program Unit Review

Welding - FY 2017-18 (plus current FY Summer and Fall)

5.2b Average Class Size The average class size in each Discipline at first census (excludes cancelled classes).

Santa Rosa Campus

Discipline	X2015	F2015	S2016	X2016	F2016	S2017	X2017	F2017	S2018
Welding	0.0	21.0	22.4	0.0	21.6	21.1	19.0	19.4	21.0

Petaluma Campus (Includes Rohnert Park and Sonoma)

Discipline	X2015	F2015	S2016	X2016	F2016	S2017	X2017	F2017	S2018
Welding	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Other Locations (Includes the PSTC, Windsor, and other locations)

Discipline	X2015	F2015	S2016	X2016	F2016	S2017	X2017	F2017	S2018
Welding	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

ALL Locations (Combined totals from ALL locations in the District)

Discipline	X2015	F2015	S2016	X2016	F2016	S2017	X2017	F2017	S2018
Welding	0.0	21.0	22.4	0.0	21.6	21.1	19.0	19.4	21.0

5.3 Instructional Productivity

The instructional productivity is less than, but very close to the district target due to the 24 student class limit.

Santa Rosa Junior College - Program Unit Review Welding - FY 2017-18 (plus current FY Summer and Fall)

5.3 Instructional Productivity The ratio of Full-Time Equivalent Students (FTES) to Full-Time Equivalent Faculty (FTEF) in each Discipline at first census.

Santa Rosa Campus

Welding		X2015	F2015	S2016	X2016	F2016	S2017	X2017	F2017	S2018
	FTES	0.00	25.20	26.00	0.00	24.93	30.93	4.50	12.93	15.00
	FTEF	0.00	1.80	1.80	0.00	1.86	2.30	0.38	1.04	1.00
	Ratio	0.00	14.00	14.44	0.00	13.43	13.48	11.80	12.40	14.40

Petaluma Campus (Includes Rohnert Park and Sonoma)

Welding		X2015	F2015	S2016	X2016	F2016	S2017	X2017	F2017	S2018
	FTES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	FTEF	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Ratio	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Other Locations (Includes the PSTC, Windsor, and other locations)

Welding		X2015	F2015	S2016	X2016	F2016	S2017	X2017	F2017	S2018
	FTES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	FTEF	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Ratio	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

ALL Locations (Combined totals from ALL locations in the District)

Welding		X2015	F2015	S2016	X2016	F2016	S2017	X2017	F2017	S2018
	FTES	0.00	25.20	26.00	0.00	24.93	30.93	4.50	12.93	15.00
	FTEF	0.00	1.80	1.80	0.00	1.86	2.30	0.38	1.04	1.00
	Ratio	0.00	14.00	14.44	0.00	13.43	13.48	11.80	12.40	14.40

5.4 Curriculum Currency

All of our curriculum is current

DisciplineNbr	VersionNbr	TermCourseLastTaught	DateLastReview	CourseStatus	ApprovalStatus	Cred
WELD 121	1		4/8/2014	New Course (First Version)	Approved	no
WELD 171.1	1	Fall 2014	3/31/2014	New Course (First Version)	Approved	no
WELD 171.2	1	Fall 2014	3/31/2014	New Course (First Version)	Approved	no
WELD 171.3	1	Fall 2014	3/31/2014	New Course (First Version)	Approved	no
WELD 175A	5	Fall 2014	10/28/2013	Changed Course	Approved	no
WELD 175B	5	Fall 2014	10/28/2013	Changed Course	Approved	no
WELD 70	6	Fall 2014	10/14/2013	Changed Course	Approved	no
WELD 71	5	Spring 2014	3/12/2012	Changed Course	Approved	no
WELD 98	4	Spring 2014	3/12/2012	Changed Course	Approved	no

5.5 Successful Program Completion

We always encourage our students to complete the full welding certificate. Many students "job out", in other words get the skills they need to to get a job or keep their job. The deapartment is panning on revising the certificate next year, and creating skills certificates and capstone courses to increase program completion rates.

Cert Code	TOP	Description	Prog Awrd	2002 2003	2003 2004	2004 2005	2005 2006	2006 2007	2007 2008
3035	095650	Welding Technology	E	0	0	0	0	0	0
			L	2	7	5	8	7	2

5.6 Student Success

The student success indicators either meet or exceed the district guidelines in all three of the listed areas.

Santa Rosa Junior College - Program Unit Review

Welding - FY 2017-18 (plus current FY Summer and Fall)

5.6a Retention The percentage of students receiving a grade of A,B,C,D,CR, or I in each Discipline (duplicated headcount).

Santa Rosa Campus

Discipline	X2015	F2015	S2016	X2016	F2016	S2017	X2017	F2017	S2018
Welding	0.0%	88.4%	85.4%	0.0%	86.1%	80.0%	78.4%	84.5%	84.5%

Petaluma Campus (Includes Rohnert Park and Sonoma)

Discipline	X2015	F2015	S2016	X2016	F2016	S2017	X2017	F2017	S2018
Welding	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Other Locations (Includes the PSTC, Windsor, and other locations)

Discipline	X2015	F2015	S2016	X2016	F2016	S2017	X2017	F2017	S2018
Welding	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

ALL Locations (Combined totals from ALL locations in the District)

Discipline	X2015	F2015	S2016	X2016	F2016	S2017	X2017	F2017	S2018
Welding	0.0%	88.4%	85.4%	0.0%	86.1%	80.0%	78.4%	84.5%	84.5%

Santa Rosa Junior College - Program Unit Review

Welding - FY 2017-18 (plus current FY Summer and Fall)

5.6b Successful Course Completion The percentage of students receiving a grade of A,B,C, or CR in each Discipline (duplicated headcount).

Santa Rosa Campus

Discipline	X2015	F2015	S2016	X2016	F2016	S2017	X2017	F2017	S2018
Welding	0.0%	83.7%	80.3%	0.0%	82.1%	76.8%	67.6%	77.6%	77.9%

Petaluma Campus (Includes Rohnert Park and Sonoma)

Discipline	X2015	F2015	S2016	X2016	F2016	S2017	X2017	F2017	S2018
Welding	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Other Locations (Includes the PSTC, Windsor, and other locations)

Discipline	X2015	F2015	S2016	X2016	F2016	S2017	X2017	F2017	S2018
Welding	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

ALL Locations (Combined totals from ALL locations in the District)

Discipline	X2015	F2015	S2016	X2016	F2016	S2017	X2017	F2017	S2018
Welding	0.0%	83.7%	80.3%	0.0%	82.1%	76.8%	67.6%	77.6%	77.9%

Santa Rosa Junior College - Program Unit Review

Welding - FY 2017-18 (plus current FY Summer and Fall)

5.6c Grade Point Average The average GPA in each Discipline (UnitsTotal / GradePoints).

Santa Rosa Campus

Discipline	X2015	F2015	S2016	X2016	F2016	S2017	X2017	F2017	S2018
Welding	0.00	2.83	2.81	0.00	2.79	2.78	2.12	2.89	2.81

Petaluma Campus (Includes Rohnert Park and Sonoma)

Discipline	X2015	F2015	S2016	X2016	F2016	S2017	X2017	F2017	S2018
Welding	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Other Locations (Includes the PSTC, Windsor, and other locations)

Discipline	X2015	F2015	S2016	X2016	F2016	S2017	X2017	F2017	S2018
Welding	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

ALL Locations (Combined totals from ALL locations in the District)

Discipline	X2015	F2015	S2016	X2016	F2016	S2017	X2017	F2017	S2018
Welding	0.00	2.83	2.81	0.00	2.79	2.78	2.12	2.89	2.81

5.7 Student Access

Welding - FY 2013-14 (plus current FY Summer and Fall)

Santa Rosa Junior College - Program Unit Review

Welding - FY 2017-18 (plus current FY Summer and Fall)

5.7a Students Served - by Ethnicity The number of students in each Discipline at first census broken down by ethnicity (duplicated headcount).

ALL Locations (Combined totals from ALL locations in the District)

Welding	Ethnicity	2015-16	Percent	2016-17	Percent	2017-18	Percent	2018-19	Percent
	White	182	63.4%	171	54.6%	191	52.9%	200	55.6%
	Asian	2	0.7%	4	1.3%	4	1.1%	5	1.4%
	Black	4	1.4%	2	0.6%	6	1.7%	7	1.9%
	Hispanic	80	27.9%	95	30.4%	112	31.0%	120	33.3%
	Native American	2	0.7%	3	1.0%	7	1.9%	8	2.2%
	Pacific Islander	2	0.7%	3	1.0%	1	0.3%	2	0.6%
	Filipino	1	0.3%	0	0.0%	3	0.8%	4	1.1%
	Other Non-White	11	3.8%	18	5.8%	17	4.7%	20	5.5%
	Decline to state	3	1.0%	17	5.4%	20	5.5%	25	6.9%
	ALL Ethnicities	287	100.0%	313	100.0%	361	100.0%	400	100.0%

Santa Rosa Junior College - Program Unit Review

Welding - FY 2017-18 (plus current FY Summer and Fall)

5.7b Students Served - by Gender The number of students in each Discipline at first census broken down by gender (duplicated headcount).

ALL Locations (Combined totals from ALL locations in the District)

Welding	Gender	2015-16	Percent	2016-17	Percent	2017-18	Percent	2018-19	Percent
	Male	262	91.3%	286	91.4%	322	89.2%		
	Female	22	7.7%	15	4.8%	32	8.9%		
	Unknown	3	1.0%	12	3.8%	7	1.9%		
	ALL Genders	287	100.0%	313	100.0%	361	100.0%		

Santa Rosa Junior College - Program Unit Review

Welding - FY 2017-18 (plus current FY Summer and Fall)

5.7c Students Served - by Age The number of students in each Discipline at first census broken down by age (duplicated headcount).

ALL Locations (Combined totals from ALL locations in the District)

Welding	Age Range	2015-16	Percent	2016-17	Percent	2017-18	Percent	2018-19	Percent
	0 thru 18	41	14.3%	54	17.3%	60	16.6%	60	16.6%
	19 and 20	77	26.8%	68	21.7%	96	26.6%	96	26.6%
	21 thru 25	70	24.4%	74	23.6%	74	20.5%	74	20.5%
	26 thru 30	33	11.5%	43	13.7%	46	12.7%	46	12.7%
	31 thru 35	25	8.7%	31	9.9%	25	6.9%	25	6.9%
	36 thru 40	12	4.2%	7	2.2%	24	6.6%	24	6.6%
	41 thru 45	4	1.4%	8	2.6%	10	2.8%	10	2.8%
	46 thru 50	7	2.4%	10	3.2%	10	2.8%	10	2.8%
	51 thru 60	12	4.2%	12	3.8%	12	3.3%	12	3.3%
	61 plus	6	2.1%	6	1.9%	4	1.1%	4	1.1%
	ALL Ages	287	100.0%	313	100.0%	361	100.0%	361	100.0%

5.8 Curriculum Offered Within Reasonable Time Frame

All courses are offered every semester.

5.9a Curriculum Responsiveness

5.9b Alignment with High Schools (Tech-Prep ONLY)

At this time there are only two high schools in the county with metal shop courses, and do not teach enough welding to meet the credit by exam standards.

5.10 Alignment with Transfer Institutions (Transfer Majors ONLY)

There are no transfer programs that include welding as a major.

5.11a Labor Market Demand (Occupational Programs ONLY)

WELDING:

The job market is extremely competitive. It is estimated that nation wide there are approx. 300,000 welders in need currently. Steel construction and MFG. is steady and jobs are plentiful along with the ever growing stainless steel business due to the influx in winery population per capita. Employers who are in need of qualified employees continue to contact the SRJC Welding Dept. for these people due to the reputation of proven quality welders. The students see the possibility of employment in the welding industry better than many other areas. It is anticipated the welding industries will continue to improve, jobs continue open up and those who have prepared properly today will get those jobs.

Welding

Welding is a highly skilled trade and welders may be employed in areas of ship building, bridges and building construction, pipeline construction, refrigeration, missile and aircraft construction, automobiles, and a variety of related areas where metal must be joined together.

Developments in metallurgy and technology of new welding equipment have created many types of new techniques and skills. Welders who qualify are always in demand. The current hourly rate for welders is \$15-\$35.

Occupational Projections of Employment 2012-2022

California 514121 Welders, Cutters, Solderers, and Brazers, 60 total

California 514122 Welding, Soldering, and Brazing Machine Setters, Operators, 70 total

5.11b Academic Standards

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6.1 Progress and Accomplishments Since Last Program/Unit Review

Rank	Location	SP	M	Goal	Objective	Time Frame	Progress to Date
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6.2b PRPP Editor Feedback - Optional

6.3a Annual Unit Plan

Rank	Location	SP	M	Goal	Objective	Time Frame	Resources Required
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