

# Santa Rosa Junior College

## Program Resource Planning Process

### Diesel Equipment Technology 2017

#### 1.1a Mission

The Diesel Equipment Technology program operates with a mission of serving the future and present workforce of the Sonoma County, North Bay and Redwood Empire areas. By providing education and training to entry-level students seeking a technician career, mid-range employees and journey-level occupied technicians, the program improves and helps maintain the professional level of service that is offered to customers that own and operate any of the following; agricultural machinery, construction equipment, marine or stationary power source engines and/or transportation vehicles.

The Industrial and Trade Technology department consists of the Automotive, Diesel, Machine Tool and Welding programs providing career technological training to students beginning and continuing their coursework within their chosen fields. We work closely with local industry leaders to make sure our programs consistently educate students to meet current industry standards and maintain close ties with local area high schools through the Tech-Prep program. We offer a learning environment that is open and affirming to all students, provide safety and environmental education as it relates to each program. Our instructional programs must be flexible to the needs of all students entering their chosen occupational fields and foster learning environments that allow each student to develop the necessary skills to achieve their educational goals. It is important that faculty provide instruction that reflects the latest industrial advancements, update program curriculum, and provide the latest equipment to maintain our individual laboratories. Our programs must meet the increasing and evolving environmental public requirements.

#### 1.1b Mission Alignment

The Diesel Equipment Technology Program improves student skills with hands on training in diesel equipment repair allowing them to be more competitive in the job market.

#### 1.1c Description

The Diesel Equipment Technology (DET) program Provides comprehensive and complete basic skill level training to all students. It offers educational opportunities that positively affect each student and the community in consideration of economic status. Moreover, the DET program offers a classroom environment that is welcoming and acceptable to all interested individuals without concern for prejudice. It provides programs and classes that will meet the needs of currently employed individuals, as well as environmental education that relates to the diesel and equipment technology trades. The program maintains curriculum, facilities and equipment in a manner that encourages excellence in training and education. It partners with the area business leaders to provide communication and fluidity between the college and community, and provides a plan and practice for the recruitment of new students into the program. The DET program enhances and improves the life of the campus community, as well as coordinating with related programs both on and off campus to keep in-touch with current business practices. The program is responsible for the budget, facilities and equipment, while planning for the future needs.

## 1.1d Hours of Office Operation and Service by Location

In order to reach as many students as possible, the Automotive, Diesel, Machine Tool and Welding programs offer day and evening classes.

The service center is located in the Lounibos Center Bldg. the administrative office hours are 8:30 am to 12:30 pm Monday through Friday. The service center serves the Automotive, Diesel, Machine Tool and Welding Programs.

## 1.2 Program/Unit Context and Environmental Scan

The Diesel equipment industry has seen a decline in construction related work due to the economy. Trucking and agricultural job markets remain strong. There is a demand for entry level technicians in both the truck and agricultural markets. There have been some minor improvements in the construction industry that may indicate a return of new construction and expansion of the job market in construction equipment.

The diesel program has seen a reduction in the support from industry due to the economy. Two large local employers have closed down, Redwood Peterbuilt and Bayshore International. The largest supporter of the diesel program, Peterson tractor has seen a 70% reduction in business on the construction equipment side.

Technology in the diesel field continues to become more complex, with increases in fuel management costs and air quality standards. Computer controls have become mandatory on all diesel equipment, both on road and off. Without support from the industry, SRJC needs to invest in late model systems and the technology to diagnose these systems to prepare our students for the job market.

The Diesel program has started an internship program. There are several local employers who have expressed interest in the program.

The Diesel program has articulation agreements with four local high schools.

## 2.1a Budget Needs

The diesel program has looked closely at expenditures in the 4000 and 5000 Categories. There has been a reduction in expenditures by using existing stock and repairing equipment in house. These steps have resulted in a savings in category 5000 expenditures. The diesel program cannot continue to operate at these levels, due to the depletion of stock and deferred maintenance.

This year we have had no equipment budget to pay for the needed equipment (see Instructional Equipment list) and yet we have significant need. Without equipment money we have been unable to continue with the appropriate re-fitting of the program with special tools and modern equipment.

**Combined Programs:**

Rollover repair budget-combined program - A combined repair budget, that is dedicated to repair only, non-transferable and can rollover. It would be used to repair the equipment used by all Lounibos programs. Some years we go through our entire repair budget plus more, some years we barely tap into this fund. If we could have a rollover budget of \$2,000 a year to start increasing each year, so that any unused funds are moved to the next year, we could do repairs as needed, but also "save up" for major repairs.

## Diesel Equipment Technology - FY 2015-16

### 2.1 Fiscal Year Expenditures

#### Santa Rosa Campus

Expenditure Category	Unrestricted Funds	Change from 2014-15	Restricted Funds	Change from 2014-15	Total	Change from 2014-15
Faculty payroll	\$85,854.30	5.19%	\$0.00	0.00%	\$85,854.30	5.19%
Adjunct payroll	\$10,428.69	0.00%	\$0.00	0.00%	\$10,428.69	0.00%
Classified payroll	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%
STNC payroll	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%
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)	\$21,173.64	22.75%	\$0.00	0.00%	\$21,173.64	22.75%
Supplies (4000's)	\$2,151.53	32.99%	\$0.00	0.00%	\$2,151.53	32.99%
Services (5000's)	\$10.43	250.00%	\$0.00	0.00%	\$10.43	250.00%
Equipment (6000's)	\$1,920.00	0.00%	\$29,757.01	-46.07%	\$31,677.01	-44.52%
<b>Total Expenditures</b>	<b>\$121,538.59</b>	<b>18.68%</b>	<b>\$29,757.01</b>	<b>-46.07%</b>	<b>\$151,295.60</b>	<b>-3.99%</b>

#### Expenditure Totals

Expenditure Category	Amount	Change from 2014-15	District Total	% of District Total
Total Expenditures	\$151,295.60	-3.99%	\$142,812,136.74	0.11%
Total Faculty Payroll	\$96,282.99	17.97%	\$46,486,773.56	0.21%
Total Classified Payroll	\$0.00	0.00%	\$22,009,293.41	0.00%
Total Management Payroll	\$0.00	0.00%	\$9,770,442.32	0.00%
Total Salary/Benefits Costs	\$117,456.63	18.80%	\$102,858,006.58	0.11%
Total Non-Personnel Costs	\$33,838.97	-42.37%	\$16,325,691.74	0.21%

## 2.1b Budget Requests

Rank	Location	SP	M	Amount	Brief Rationale
0001	ALL	00	00	\$5,000.00	Cost to repair equipment has been rising, and as equipment ages, more repairs are needed

## 2.2a Current Classified Positions

Position	Hr/Wk	Mo/Yr	Job Duties
Administrative Assistant II	20.00	12.00	Provides administrative and program support to Department Chair, faculty, staff and students. Monitors budgets and prepares all Schedule Change Forms, Personnel Action Forms, helps with scheduling, and coordinates four advisory committees, SkillsUSA events, and certificate ceremonies for Industrial & Trade Technology, and SkillsUSA programs. Serves on various committees, and provides administrative assistance to new faculty.

## 2.2b Current Management/Confidential Positions

Position	Hr/Wk	Mo/Yr	Job Duties
Department Chair	12.00	20.00	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 Alternative Fuels)

## 2.2c Current STNC/Student Worker Positions

Position	Hr/Wk	Mo/Yr	Job Duties
STNC	5.50	8.00	General shop clean up

## 2.2d Adequacy and Effectiveness of Staffing

### Diesel Equipment Technology - FY 2015-16

## 2.2 Fiscal Year Employee Data and Calculations

### Employee Head Counts

Employee Category	Count	Change from 2014-15	District Total	% of District Total
Contract Faculty	1	0.00%	306	0.33%
Adjunct Faculty	1	0.00%	1389	0.07%
Classified Staff	0	0.00%	541	0.00%
STNC Workers	0	0.00%	609	0.00%
Student Workers	0	0.00%	616	0.00%
Mgmt/Admin/Dept Chair	0	0.00%	176	0.00%

### Employee FTE Totals

FTE Category	FTE	Change from 2014-15	District Total	% of District Total
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FTE-F - Faculty	2.0000	100.00%	743.0476	0.27%
FTE-CF - Contract Faculty	1.0000	0.00%	303.3500	0.33%
FTE-AF - Adjunct Faculty	1.0000	0.00%	439.6976	0.23%
FTE-C - Classified	0.0000	0.00%	450.7804	0.00%
FTE-ST - STNC	0.0000	0.00%	89.9729	0.00%
FTE-SS - Support Staff	0.0000	0.00%	714.9341	0.00%
FTE-SW - Student Workers	0.0000	0.00%	174.1808	0.00%
FTE-M - Management	0.0000	0.00%	128.9297	0.00%
FTE-DC - Department Chairs	0.0000	0.00%	50.0000	0.00%

## Student Data

Data Element	Value	Change from 2014-15	District Total	% of District Total
FTES-CR - Credit	25.4686	26.66%	15431.0806	0.17%
FTES-NC - Non-Credit	0.0000	0.00%	2170.0038	0.00%
FTES - combined	25.4686	26.66%	17601.0844	0.14%
Students Enrolled/Served	75	-58.56%	30000	0.25%

## Calculations

Data Element	Value	Change from 2014-15	District Total	% of District Total
FTE-S : FTE-F	12.7343	-36.67%	23.6877	53.76%
FTE-AF : FTE-CF	1.0000	0.00%	1.4495	68.99%
FTE-F : FTE-SS	0.0000	0.00%	1.0393	0.00%
FTE-F : FTE-M	0.0000	0.00%	5.7632	0.00%
FTE-SS : FTE-M	0.0000	0.00%	5.5451	0.00%
FTE-ST : FTE-C	0.0000	0.00%	0.1996	0.00%
Average Faculty Salary per FTE-F	\$48,141.50	-41.02%	\$62,562.31	76.95%
Average Classified Salary per FTE-C	\$0.00	0.00%	\$48,824.87	0.00%
Average Management Salary per FTE-M	\$0.00	0.00%	\$75,781.16	0.00%
Salary/Benefit costs as a % of total budget	77.63%	23.74%	72.02%	107.79%
Non-Personnel \$ as a % of total budget	22.37%	-39.98%	11.43%	195.65%
Restricted Funds as a % of total budget	19.67%	-43.83%	16.55%	118.88%
Total Unit Cost per FTE-F	\$75,647.80	-52.00%	\$192,197.83	39.36%
Total Unit Cost per FTE-C	\$0.00	0.00%	\$316,810.88	0.00%
Total Unit Cost per FTE-M	\$0.00	0.00%	\$1,107,674.47	0.00%
Total Unit Cost per FTE-S	\$5,940.48	-24.20%	\$8,113.83	73.21%
Total Unit Cost per student served/enrolled	\$2,017.27	131.70%	\$4,760.40	42.38%

**2.2a Classified Positions** Employees paid from a Classified OBJECT code

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

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

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

**2.2c STNC Workers** Employees paid from an STNC OBJECT code

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



**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	ALL	00	00		Lab Assistant / Tool Room Manager	Classified

## 2.3a Current Contract Faculty Positions

Position	Description
Jesse Kosten	Diesel Program Coordinator and diesel instructor

2.3b Full-Time and Part-Time Ratios

Discipline	FTEF Reg	% Reg Load	FTEF Adj	% Adj Load	Description
Diesel	0.9800	0.9800	0.0000	0.0000	

## 2.3c Faculty Within Retirement Range

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

The Diesel/Equipment Technology program is currently operational with one full-time certificated faculty member. Student enrollments have increased over the past several years, and with the class section reductions the class size has grown. This has put an added burden on the full time instructor. Additional funding is needed to hire a support person to help with tool room management and to help watch all the students during lab classes; it is difficult to run a truly safe lab class with just one instructor.

The Diesel Technology Program also needs at least one adjunct faculty. It is important to have an adjunct to back up the full-time instructor in case of illness or disability. Also, with climbing enrollment we will need an additional instructor to allow more sections to be offered.

We have an open adjunct pool, but have had no applicants. It is difficult to draw instructors from industry due to the high incomes that they have from working as technicians, and the hours that they put in per week. It takes a unique person who really wants to teach, and is willing to give up precious time with their family to train others, to take a job as an adjunct instructor.

There have been no adjunct interview in recent memory for the reasons just noted.

# Santa Rosa Junior College - Program Unit Review

## Diesel Equipment Technology - FY 2015-16

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

Name Last	First	Position	Hours	HR FTE	DM FTE
Gully	Brian	Faculty	0.00	1.0000	0.0000
<b>Totals</b>			<b>0.00</b>	<b>1.0000</b>	<b>0.0000</b>

# Santa Rosa Junior College - Program Unit Review

## Diesel Equipment Technology - FY 2015-16

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

<b>Name Last</b>	<b>First</b>	<b>Position</b>	<b>Hours</b>	<b>FTE</b>
Gully	Brian		112.50	1.0000
<b>Totals</b>			<b>112.50</b>	<b>1.0000</b>

## 2.3e Faculty Staffing Requests

Rank	Location	SP	M	Discipline	SLO Assessment Rationale
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## 2.4b Rationale for Instructional and Non-Instructional Equipment, Technology, and Software

**All Data/Mitchell:** Current information is critical for repairs on newer vehicles. We work on many late model vehicles during labs, both light duty and heavy duty passenger cars and heavy duty trucks. We need both light and heavy duty service information. This requires a yearly subscription of \$2400.

**Diesel Engine Trainer w/SCR:** Over the last ten years there has been a significant change in diesel engine technology. Exhaust treatment has become standard equipment on all late model engines. The diesel advisory board has requested we start training our students in late model exhaust treatment systems. To facilitate this request we need a late model trainer. This trainer is a late model engine with the exhaust treatment system included and is running and functional.

**Electrical Diagnostic, Repair and Testing Equipment:** Add new electrical diagnostic testing equipment to the DET program. Equipment will include digital multiple meters, diagnostic tracing equipment, power probe testing, thermal imaging equipment, electrical training sets and diesel oscilloscope. Supplies to include wiring, terminals and connectors to aid with training.

**Engine Blocks:** The current engine blocks that are being disassembled, inspected and reassembled are no longer used in industry due to emissions laws. They are also unable to be test run and have multiple parts missing per engine. Replacing the engines with current technology will help match industry.

**HD Transmissions:** The current transmissions that are being used are out dated to current industry standards and are missing parts / worn out from student tear downs. Replacement to current model transmissions will benefit the students once they leave the program. Also adding transmissions from off highway equipment will help the students going into those fields.

**HD Brake Lathe:** Currently we do not have a brake lathe capable of medium and heavy duty trucks. Students are unable to practice brake and flywheel machining.

**Heavy Duty Lift:** The diesel shop currently only has one vehicle lift for raising a vehicle over 24". To properly train students in undercarriage, brake and chassis repair, we need another full size lift. This lift will allow vehicles to be raised safely to the 6' level.

**HD Alignment Machine:** We will be installing a HD Rack, but it will not have the digital alignment machine to go with it. Currently the shops in this county do not use digital alignment racks, but the industry is regionally so we need to prepare the students for new and upcoming technology.

**Medium Duty Truck MY2010 or newer w/SCR:** The current trucks that the DET Program has are older emission system platforms and do not meet requirement for current air quality standards. The 2009 International Truck has a DPF system, but not SCR. We also need more than one truck/chassis that the students can interact with.

## 2.4c Instructional Equipment and Software Requests

Rank	Location	SP	M	Item Description	Qty	Cost Each	Total Cost	Requestor	Room/Space	Contact
0001	ALL	04	01	AllData/Mitchell	1	\$3,000.00	\$3,000.00	Jesse Kosten	2370	Jesse Kosten
0002	ALL	01	01	Diesel Engine Trainer w/SCR	1	\$75,000.00	\$75,000.00	Jesse Kosten	2370	Jesse Kosten
0003	ALL	01	01	Electrical Diagnostic Equipment	1	\$20,000.00	\$20,000.00	Jesse Kosten	2370	Jesse Kosten
0004	ALL	01	01	Engine blocks	4	\$20,000.00	\$80,000.00	Jesse Kosten	2370	Jesse Kosten
0006	ALL	01	01	HD Brake Lathe	1	\$14,000.00	\$14,000.00	Jesse Kosten	2370	Jesse Kosten
0007	ALL	04	01	Heavy Duty Lift	1	\$12,000.00	\$12,000.00	Jesse Kosten	2370	Jesse Kosten
0009	ALL	01	01	Medium Duty Truck MY2010 or newer w/SCR	2	\$50,000.00	\$100,000.00	Jesse Kosten	2370	Jesse Kosten

## 2.4d Non-Instructional Equipment, Software, and Technology Requests

Rank	Location	SP	M	Item Description	Qty	Cost Each	Total Cost	Requestor	Room/Space	Contact
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## 2.5a Minor Facilities Requests

Rank	Location	SP	M	Time Frame	Building	Room Number	Est. Cost	Description
0001	Shone Farm	00	00	Urgent	Shone Farm	New	\$0.00	Diesel repair shop at Shone Farm or another offsite location.



## 2.5b Analysis of Existing Facilities

The current Diesel shop located in the Lounibus building is inadequate. We lack the space to effectively work on large vehicles. We commonly have 10 to 15 vehicles being worked on during a normal lab session. Most of these vehicles are outside the shop due to limited shop space.

The Diesel equipment technology program should be relocated to the Shone Farm or similar large location. A new shop and classroom would need to be constructed.

Relocating the Diesel program would have many benefits to our students and SRJC:

- With the increase in shop size the impacted conditions would be alleviated. Students would have the shop space to work indoors out of the weather.
- The agricultural equipment at the Shone Farm could be maintained and repaired by the Diesel program students. Approximately two thirds of our diesel students will go to work on agricultural or construction equipment, both types of equipment are located at the Shone Farm.
- There is room to operate and test equipment. We have no area on the SRJC main campus to operate construction and agricultural equipment.

The existing shop, 2370, can be utilized by other programs in the Lounibus building. There is a need for more shop space in Lounibus and moving the Diesel program would free up more space for other programs, like welding.

## 3.1 Develop Financial Resources

Will be required Spring 2018

## 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, the Diesel Department 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

Allow time during normal work hours to attend training that allows the employees to better do their job, such as PRPP, CIS, forklift and any other training applicable to their jobs.

### 3.4 Safety and Emergency Preparedness

Cliff Norton and Dave Yoast are the current emergency preparedness personnel.

### 3.5 Establish a Culture of Sustainability

The Diesel program recycles all metals from replaced components. All oils/filters are gathered and sent to a recycler. Cardboard and other recyclable items are separated and recycled.

### 4.1a Course Student Learning Outcomes Assessment

The assessment cycle will be two classes each semester, one half of the offered classes each school year. This will allow each class to be assessed every other academic year.

All DET classes have been assessed over the last two academic years.

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Course	SLO #s	Participating Faculty	Semester Initiated or to Be Initiated	Semester Completed	Comments	Year of Next Assessment
DET 179 (80)	1	B Gully	F 13	F 13		F 14
DET 181 (81)	1	B Gully	S 12	S 12		S 14
DET 182a (82a)	1	B Gully	S 12	S 12		S 14
DET 182b (82b)	1	B Gully	S 13	S 13		F 14
DET 184 (84)	1	B Gully	F 13	F 13		S 15
DET 185 (85)	1	B Gully	F 13	F 13		F 15
DET 188 (88)	1	B Gully	S 13	S 13		S 15
DET 189 (89)	1	B Gully	S 13	S 13		F 15

### 4.1b Program Student Learning Outcomes Assessment

The DET certificate programs have been assessed this year. Assessment reports are in Sharepoint.

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Course	SLO #s	Participating Faculty	Semester Initiated or to Be Initiated	Semester Completed	Comments	Year of Next Assessment
DET 179 (80)	1	B Gully	F 13	F 13		F 14
DET 181 (81)	1	B Gully	S 12	S 12		S 14
DET 182a (82a)	1	B Gully	S 12	S 12		S 14
DET 182b (82b)	1	B Gully	S 13	S 13		F 14
DET 184 (84)	1	B Gully	F 13	F 13		S 15
DET 185 (85)	1	B Gully	F 13	F 13		F 15
DET 188 (88)	1	B Gully	S 13	S 13		S 15
DET 189 (89)	1	B Gully	S 13	S 13		F 15

#### 4.1c Student Learning Outcomes Reporting

Type	Name	Student Assessment Implemented	Assessment Results Analyzed	Change Implemented
Course	Det 80 - Diesel Shop Practices	Fall 2013	Fall 2013	N/A
Course	Det 81 - Prevent Maint	Spring 2012	Spring 2012	N/A
Course	Det 82a-Diesel Engine Overhaul	Spring 2012	Spring 2012	N/A
Course	Det 82b-Diesel Fuel Systems	Spring 2013	Spring 2013	N/A
Course	det 84 Hydraulics	Fall 2013	Fall 2013	N/A
Course	Det 85 - Heavy Duty Chassis	Fall 2013	Fall 2013	N/A
Course	Det 88 - HD Power Trans	Spring 2013	Spring 2013	N/A
Course	Det 89 - HD Electrical	Spring 2013	Spring 2013	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
det 179	X	X	X	X	X	X	X	X	X	X	X	X				X
det 181	X	X	X	X	X		X	X	X	X	X	X				X
Det 182a	X	X	X	X	X		X	X	X	X	X	X				X
det 182b	X	X	X	X	X		X	X	X	X	X	X				X
det 184	X	X	X	X	X		X	X	X	X	X	X				X
det 185	X	X	X	X	X	X	X	X	X	X	X	X				X
det 188	X	X	X	X	X		X	X	X	X	X	X				X
det 189	X	X	X	X	X		X	X	X	X	X	X				X

#### 4.2b Narrative (Optional)

All of our courses have components of the institutional student learning outcomes. In reviewing the data it appears that we are strong in most of the goals and only failing to meet the institutional student learning outcome regarding personal health. We will see if there are more ways to work this into our program in the future.

## 5.0 Performance Measures

Not applicable

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

The Industrial and Trade Technology department offers both day and evening courses and has recently started offering weekend classes. We have not expanded to other campuses/sites as there are no shops there.

We do not offer a distance learning component as all the current classes are hands on. We are trying to identify courses that can be modified to be offered online.

The Diesel Technology program offers a balanced approach to training, unique in our experience. The core classes are offered from 12:30 p.m. until 5:00 p.m., and from 6:00 p.m. until 10:30 p.m. every semester. The classes are eight weeks long, and at mid-semester the afternoon and evening classes switch schedules (afternoon becomes evening, and evening becomes afternoon). This has the intended effect of allowing students to get all the core classes during the same timeframe; either afternoon or evening.

## Santa Rosa Junior College - Program Unit Review Diesel Equipment Technology - FY 2013-14 (plus current FY Summer and Fall)

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

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

Discipline	F2011	S2012	F2012	S2013	F2013	S2014	F2014	S2015
DET 179							21	
DET 181								16
DET 182A								18
DET 182B								13
DET 184							18	
DET 185							18	
DET 188							14	
DET 189								17
DET 80	24		25		26			
DET 81		24		27		25		
DET 82A		24		23		25		
DET 82B		24		20		19		
DET 84	15		24		20			
DET 85	23		22		22			
DET 88	18		21		23			

DET 89		22		20		20		
	174		182		180		135	

## 5.2a Enrollment Efficiency

### Diesel Equipment Technology - FY 2013-14 (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).

#### Diesel Major Efficiency

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

Course	F2011	S2012	F2012	S2013	F2013	S2014	F2014	S2015	
DET 179							105.00%		105.00%
DET 181								80.00%	80.00%
DET 182A								90.00%	90.00%
DET 182B								65.00%	65.00%
DET 184							72.00%		72.00%
DET 185							90.00%		90.00%
DET 188							56.00%		56.00%
DET 189								68.00%	68.00%
DET 80	96.00%		100.00%		104.00%				100.00%
DET 81		120.00%		108.00%		125.00%			117.67%
DET 82A		120.00%		115.00%		125.00%			120.00%
DET 82B		120.00%		100.00%		95.00%			105.00%
DET 84	50.00%		80.00%		80.00%				70.00%
DET 85	92.00%		88.00%		110.00%				96.67%
DET 88	60.00%		70.00%		92.00%				74.00%
DET 89		88.00%		80.00%		80.00%			82.67%

## 5.2b Average Class Size

During the normal school year, our class size runs from 18.8 to 23.3. We have almost all lab classes and having more than 20 students in a class jeopardizes student safety. The average class size has been fairly consistent.

### Diesel Equipment Technology - - FY 2013-14 (plus current FY Summer and Fall)

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

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

Discipline	F2011	S2012	F2012	S2013	F2013	S2014	F2014	S2015
DET 179							21	
DET 181								16
DET 182A								18
DET 182B								13
DET 184							18	
DET 185							18	
DET 188							14	
DET 189								17
DET 80	24		25		26			
DET 81		24		27		25		
DET 82A		24		23		25		
DET 82B		24		20		19		
DET 84	15		24		20			
DET 85	23		22		22			
DET 88	18		21		23			
DET 89		22		20		20		
SUM	80	94	92	90	91	89	71	64
Average	20	23.5	23	22.5	22.75	22.25	17.75	16

## 5.3 Instructional Productivity

### Diesel Equipment Technology - FY 2013-14 (plus current FY Summer and Fall)

The Diesel Technology Program holds steady at about a 14.75 ratio. The calculation of what an FTES is, is baffling to us to say the least, but if we are below the 18.75 tipping point it is probably because our class sizes are limited to 20 with a wait list of 3 due to the dangers of running any more students than that in a lab. The Bureau of Automotive Repair requirements

for lab classes are: 25 students maximum...any more students than that requires a second instructor in the lab.

**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**

Diesel/Equipment Technology		X2011	F2011	S2012	X2012	F2012	S2013	X2013	F2013	S2014
	<b>FTES</b>	0.00	7.15	10.96	0.00	7.00	10.43	0.00	7.15	10.28
	<b>FTEF</b>	0.00	0.49	0.74	0.00	0.49	0.74	0.00	0.49	0.74
	<b>Ratio</b>	<b>0.00</b>	<b>14.73</b>	<b>14.82</b>	<b>0.00</b>	<b>14.41</b>	<b>14.10</b>	<b>0.00</b>	<b>14.72</b>	<b>13.90</b>

**Petaluma Campus** (Includes Rohnert Park and Sonoma)

Diesel/Equipment Technology		X2011	F2011	S2012	X2012	F2012	S2013	X2013	F2013	S2014
	<b>FTES</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	<b>FTEF</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	<b>Ratio</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

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

Diesel/Equipment Technology		X2011	F2011	S2012	X2012	F2012	S2013	X2013	F2013	S2014
	<b>FTES</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	<b>FTEF</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	<b>Ratio</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

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

Diesel/Equipment Technology		X2011	F2011	S2012	X2012	F2012	S2013	X2013	F2013	S2014
	<b>FTES</b>	0.00	7.15	10.96	0.00	7.00	10.43	0.00	7.15	10.28
	<b>FTEF</b>	0.00	0.49	0.74	0.00	0.49	0.74	0.00	0.49	0.74
	<b>Ratio</b>	<b>0.00</b>	<b>14.73</b>	<b>14.82</b>	<b>0.00</b>	<b>14.41</b>	<b>14.10</b>	<b>0.00</b>	<b>14.72</b>	<b>13.90</b>

## 5.4 Curriculum Currency

The Diesel major certificate will be revised this next year due to changes in the curriculum of the four year Colleges in California. The DET classes are no longer transferable. All DET classes will be renumbered to 100 series. The certificate program will be changed to reflect the renumbering of the DET classes. The diesel advisory board has approved these changes.

DisciplineNbr	VersionNbr	TermCourseLastTaught	DateLastReview	CourseStatus	ApprovalStatus	Cred
DET 184	6	Fall 2014	3/10/2014	Changed Course	Approved	no
DET 185	6	Fall 2014	3/10/2014	Changed Course	Approved	no
DET 188	6	Fall 2014	3/10/2014	Changed Course	Approved	no
DET 189	6	Spring 2014	3/10/2014	Changed Course	Approved	no
DET 190.1	2	Fall 2011	3/28/2011	Changed Course	Approved	no
DET 190.1L	2	Spring 2011	9/27/2010	Changed Course	Approved	no
DET 192	4	Fall 2007	9/27/2010	Changed Course	Approved	no
DET 194	2	Fall 2011	10/11/2010	Changed Course	Approved	no
DET 195	1		9/20/2010	New Course (First Version)	Approved	no
DET 86.1	4	Spring 2007	9/27/2010	Changed Course	Approved	no

## 5.5 Successful Program Completion

We encourage students to apply for their certificates to improve their employment opportunities. We award about 3 full Diesel certificates a year. This number would improve if A & R automatically awarded them, many students do not do the paperwork needed to receive their certificates.

The demand for entry level mechanics is generally high. Many students are already employed in the repair industry. These students will enroll in only the classes they need to improve their skills. They do not complete all classes for the certificate due to the demands on their time with full time employment.

Currently we are offering several small certificates to the diesel program. These certificates are aligned with ASE truck certifications. This will increase the number of certificates available to working students and give them benchmarks toward the Associate degree.

Cert Code	TOP	Description	Prog Awrd	2002 2003	2003 2004	2004 2005	2005 2006	2006 2007	2007 2008
5065	094700	Diesel and Heavy Duty Engine (T1 and T2)	E	0	0	0	0	0	0
5064	094700	Diesel Chassis (T4 and T5)	E	0	0	0	0	0	0
5060	094700	Diesel Electrical/Electronics (T6)	E	0	0	0	0	0	0
2019	094700	Diesel Equipment Technology	S	0	0	1	2	0	2
3033	094700	Diesel Equipment Technology	T	0	4	2	1	1	3
5061	094700	Diesel Heating, Ventilation and Cooling (T7)	O	0	0	0	0	0	0



5063	094700	Diesel Power Train (T3)	E	0	0	0	0	0	0
5062	094700	Diesel Preventative Maintenance (T8)	E	0	0	0	0	0	0

## 5.6 Student Success

### Diesel Equipment Technology - FY 2013-14 (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	X2011	F2011	S2012	X2012	F2012	S2013	X2013	F2013	S2014
Diesel/Equipment Technology	0.0%	78.9%	83.0%	0.0%	83.7%	83.0%	0.0%	75.8%	73.6%

#### Petaluma Campus (Includes Rohnert Park and Sonoma)

Discipline	X2011	F2011	S2012	X2012	F2012	S2013	X2013	F2013	S2014
Diesel/Equipment Technology	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	X2011	F2011	S2012	X2012	F2012	S2013	X2013	F2013	S2014
Diesel/Equipment Technology	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%

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

Discipline	X2011	F2011	S2012	X2012	F2012	S2013	X2013	F2013	S2014
Diesel/Equipment Technology	0.0%	78.9%	83.2%	0.0%	83.7%	83.5%	0.0%	75.8%	75.3%

### FY 2013-14 (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	X2011	F2011	S2012	X2012	F2012	S2013	X2013	F2013	S2014
Diesel/Equipment Technology	0.0%	66.7%	72.0%	0.0%	71.7%	73.9%	0.0%	74.7%	64.8%

#### Petaluma Campus (Includes Rohnert Park and Sonoma)

Discipline	X2011	F2011	S2012	X2012	F2012	S2013	X2013	F2013	S2014
Diesel/Equipment Technology	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	X2011	F2011	S2012	X2012	F2012	S2013	X2013	F2013	S2014
Diesel/Equipment Technology	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%

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

Discipline	X2011	F2011	S2012	X2012	F2012	S2013	X2013	F2013	S2014
Diesel/Equipment Technology	0.0%	66.7%	72.3%	0.0%	71.7%	74.7%	0.0%	74.7%	67.0%

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

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

#### Santa Rosa Campus

Discipline	X2011	F2011	S2012	X2012	F2012	S2013	X2013	F2013	S2014
Diesel/Equipment Technology	0.00	2.39	2.44	0.00	2.56	2.33	0.00	2.28	2.02

**Petaluma Campus** (Includes Rohnert Park and Sonoma)

Discipline	X2011	F2011	S2012	X2012	F2012	S2013	X2013	F2013	S2014
Diesel/Equipment Technology	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	X2011	F2011	S2012	X2012	F2012	S2013	X2013	F2013	S2014
Diesel/Equipment Technology	0.00	0.00	2.00	0.00	0.00	2.33	0.00	0.00	2.67

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

Discipline	X2011	F2011	S2012	X2012	F2012	S2013	X2013	F2013	S2014
Diesel/Equipment Technology	0.00	2.39	2.44	0.00	2.56	2.33	0.00	2.28	2.06

## 5.7 Student Access

### Diesel Equipment Technology - FY 2013-14 (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)

Diesel/Equipment Technology	Ethnicity	2011-12	Percent	2012-13	Percent	2013-14	Percent	2014
	White	101	56.4%	96	55.2%	88	49.4%	
	Asian	0	0.0%	0	0.0%	0	0.0%	
	Black	3	1.7%	1	0.6%	1	0.6%	
	Hispanic	34	19.0%	49	28.2%	70	39.3%	
	Native American	2	1.1%	4	2.3%	0	0.0%	
	Pacific Islander	0	0.0%	0	0.0%	0	0.0%	
	Filipino	7	3.9%	1	0.6%	2	1.1%	
	Other Non-White	0	0.0%	0	0.0%	13	7.3%	
	Decline to state	32	17.9%	23	13.2%	4	2.2%	
	<b>ALL Ethnicities</b>	<b>179</b>	<b>100.0%</b>	<b>174</b>	<b>100.0%</b>	<b>178</b>	<b>100.0%</b>	

### FY 2013-14 (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)

Diesel/Equipment Technology	Gender	2011-12	Percent	2012-13	Percent	2013-14	Percent	2014
	Male	169	94.4%	166	95.4%	170	95.5%	
	Female	6	3.4%	2	1.1%	4	2.2%	
	Unknown	4	2.2%	6	3.4%	4	2.2%	
	<b>ALL Genders</b>	<b>179</b>	<b>100.0%</b>	<b>174</b>	<b>100.0%</b>	<b>178</b>	<b>100.0%</b>	

### FY 2013-14 (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)

Diesel/Equipment Technology	Age Range	2011-12	Percent	2012-13	Percent	2013-14	Percent	2014
	0 thru 18	29	16.2%	50	28.7%	48	27.0%	
	19 and 20	40	22.3%	38	21.8%	48	27.0%	
	21 thru 25	41	22.9%	35	20.1%	47	26.4%	
	26 thru 30	31	17.3%	15	8.6%	18	10.1%	
	31 thru 35	14	7.8%	11	6.3%	9	5.1%	
	36 thru 40	7	3.9%	10	5.7%	4	2.2%	
	41 thru 45	2	1.1%	4	2.3%	1	0.6%	
	46 thru 50	12	6.7%	4	2.3%	0	0.0%	
	51 thru 60	3	1.7%	7	4.0%	3	1.7%	
	61 plus	0	0.0%	0	0.0%	0	0.0%	
	<b>ALL Ages</b>	<b>179</b>	<b>100.0%</b>	<b>174</b>	<b>100.0%</b>	<b>178</b>	<b>100.0%</b>	

## 5.8 Curriculum Offered Within Reasonable Time Frame

All diesel core classes are offered in a two semester cycle. A full time student can complete the required diesel certificate classes in the two semesters. The classes alternate between day and evening so a part time student can complete all the classes in four semesters.

### 5.9a Curriculum Responsiveness

Students are surveyed each year for instructors performance. Advisory board reviews program changes and makes recommendations.

There are no general ed courses in diesel.

Many diesel classes are electives for the automotive and agriculture programs at the SRJC.

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

Yes, we are deeply involved with local high schools and work extensively with the "Manager of School Initiatives and Career Pathway Development" and her department. We have been involved with 2+2 in past years, and now have developed a process that allows local high school auto instructors to administer the SRJC credit by exams for our Det 179/181 classes. This allows high school students to enter our SRJC diesel program with advanced standing.

### 5.10 Alignment with Transfer Institutions (Transfer Majors ONLY)

Not applicable

### 5.11a Labor Market Demand (Occupational Programs ONLY)

Sonoma county growth is a follows:	percentage of growth	Job Openings
Vehicle and mobile equipment mechanics	12.6%	73
Bus and truck mechanics and engine specialists	16.7%	9
farm mechanics	12.5%	3
Mobile heavy equipment mechanics	35.3%	9
Average overall growth for Diesel related occupations:	19.2%	
total number of ob openings:		94
Nearby counties with no Diesel equipment programs: (Totals for above jobs)		
Napa county	15.4%	27
Solano county	15.6%	53
State wide		

growth in the repair and maintenance field:

14.6

2,800

## 5.11b Academic Standards

The Diesel program discusses academic standards at our department meetings. We have recently been dealing with content standards while reviewing course outlines to establish SLOs.

Employers expect that our students meet some type of industry performance standard, and we discuss these standards with our advisory committee. Often we use the ability to pass national, independent, industry accepted skill level tests as a standard. We also use acceptable work skill demonstrations as a standard.

## 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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## 6.2a Program/Unit Conclusions

Location	Program/Unit Conclusions
Santa Rosa	It is important due to the budget situation that the DET department continues to seek outside funding for some of equipment needs. The coordinator has obtained some significant donations to date. The ideal situation for the department would be to have a partnership with a major diesel manufacturer, such as Cummins or Peterbuilt. There also may be opportunities with General Motors or Ford.
Santa Rosa	The coordinator and the dean have looked at the certificate completion rates. The retention rates for the classes are within the district guidelines, but there are few certificate completers. This past year, the department created a set of 6 skills certificates that align with Automotive Service Excellence standards. It was decided that the English 100 requirement for the DET certificate will be dropped. These students want to take the core technician courses and go to work. This should be available in the fall.

## 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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