

Santa Rosa Junior College

Program Resource Planning Process

Dean II Agriculture and Natural Resources 2016

1.1a Mission

Agriculture, Natural Resources and Culinary Arts Cluster's Mission Statement:

Our mission is to increase the knowledge, improve the skills, and prepare future leaders in agriculture, natural resources and culinary arts to serve the diverse needs of the Community.

The cluster is comprised of two academic departments: Agriculture and Natural Resources and Culinary Arts. The cluster also has two state-of-the-art facilities : Shone Farm, a 365-acre living laboratory and Burdo Culinary Arts Center. The cluster has over 3000+ students enrolled pursuing certificates and/or majors in 10 different programs or degrees.

1.1b Mission Alignment

The Dean of Agriculture, Natural Resources and Culinary Arts promotes the mission of the college through its academic departments, facilities and 14 programs of study: Agriculture Business, Animal Science, Equine Science, Sustainable Agriculture, Natural Resource Management, Environmental Horticulture, Veterinary Technology, Viticulture, Wine Studies and Culinary Arts, Baking and Pastries, Front House, Dining Room Service and Restaurant Management.

The mission of the cluster is in alignment with the mission of the college as can be seen below.

- **Focus on student learning:** Preparing students for industry needs by providing appropriate career technical skills in agriculture, natural resources and culinary arts. Many of our students transfer to four year programs in CSU and UC system. Agriculture students transfer to the four CSU campuses of Fresno, Cal Poly, SLO and Cal Poly Pomona and Chico State and to UC Davis, Berkeley and Riverside campuses in California. Some students transfer to out of state institutions.
- **Services that support student success and enrich student life:** Students receive individualized attention, advice and guidance by the program coordinator to ensure their success. A dedicated Ag and CA counsellor advises students on their education and career goals. Shone Farm and Culinary Arts center provide numerous opportunities for students to get hands-on training at the farm and culinary cafe to practice the theory they learnt in class rooms. Culinary Arts program operates a career center which provides internship and career placement for students. Ag Ambassador and Culinary Cubs provide students opportunities to be involved in community and develop leadership skills.
- **Support the economic vitality, social equity and environmental stewardship of our region.** Agriculture and food industry are the number one economic engine driving the region's economy. Wine and wine related industries contribute \$14 billion to Sonoma County's economy. Through our strong and diverse agriculture, natural resources and culinary arts program, SRJC is clearly supporting

the economic vitality of the region, contributing to social equity and championing environmental stewardship.

- **Promotes personal and professional growth, cultivates joy at work and in lifelong learning.** A significant number of our students are skill builders who are gainfully employed and come to SRJC for professional growth. We provide them with opportunities to acquire practical skills required for their job. Shone Farm located in the scenic Russian River valley is an ideal environment for hands-on learning and students. Many of our students are life long learners. We have physicians, lawyers and engineers come to learn about the art and science of growing grapes and wine making.
- **Civic engagement and participation in diverse local and global communities.** Through community outreach activities and events such as Fall Festival, Spring strawberry event, Agstravaganza, our faculty and students actively engage with the agricultural community. We also receive quite a few international students who enrich diversity in our programs. Through NSF grant for Sustainable Agriculture and CCI grant for international students, we were able to serve a diverse group of students from under-represented minorities and international students to attend the ag programs.
- **We regularly assess, self-reflect, adapt and continuously improve.** The Ag/NR&CA Dean along with the department chairs support all faculty and staff to assess programs and evaluate ways to constantly improve programs in their respective departments. The department has offered informational meetings and hands on training sessions on student success, curriculum development, SLO assessment, grant development and use of technology in the class room.

1.1c Description

Agriculture and Natural Resources:

1. Curriculum

The SRJC Agriculture/Natural Resources Department teaches credit courses in Animal Science, Equine Science, Veterinary Technology, Viticulture, Agribusiness, Sustainable Agriculture, Wine Studies, Environmental Horticulture, Natural Resources, and Recreation Management. During the 2013-14 school year the Ag/NR Department served 3,000 students, and showed a steady increase from the previous year.

The Ag/NR Department has continued with major curriculum work in each of its program areas to meet the California Community College Agriculture Core Course Model Programs. SRJC Agriculture & Natural Resources program coordinators and instructors meet annually with Community College, CSU, and UC instructors to collaborate on curriculum. These courses follow a statewide articulation numbering system with CC, CSU, and UC agriculture courses statewide. Many of these courses also satisfy General Education requirements and UC/CSU numbered status. All courses in the department went through significant revisions (particularly in "greening" the curriculum) with the addition of Student Learning Outcomes (SLOs). New courses were also recently developed in Sustainable Agriculture. Many Agriculture and Natural Resources Programs have a transfer tract to CSU and UC agriculture majors.

The majors and certificate programs were reviewed/revised to meet the local employer and industry needs in the community. Program advisory committees were utilized for the review and approval process.

2. Facilities

Shone Farm

The Shone Farm totals 365 acres and includes:

- 80 acres Premium Wine Grapes (Chardonnay, Sauvignon blanc, Syrah, and Pinot noir)
- 120 acres forest (Douglas Fir, Redwood, Monterey Pine)
- 50 acres of multi use land
- 100 acres of pasture land (35 beef cattle, 35 ewes and 20 horses annually)
- 14 acre Sustainable Agriculture Unit (market garden, crop production area, greenhouse, 2 acre organic apples and 2 acres of organic olives)

The Agriculture/Natural Resources Department's 365-acre self-sustaining Shone Farm, has been integral to the laboratory "learn by doing" philosophy of the instructional program of the department. All of the science based instructional programs- animal science, general agriculture, equine science, veterinary technician, sustainable agriculture, viticulture, wine studies, and natural resources use the diverse farm entities extensively within their programs. The Agribusiness Program uses the farm with the Agriculture Leadership class' Agriculture Ambassador Program.

Shone Farm has a variety of areas for students of SRJC to gain knowledge, training and the skill needed today in the following fields of study:

- Viticulture - Projects include pruning, vine training, irrigation management, pest & disease control, soil evaluations, canopy management, vine balance assessment, crop projection and budget development.
- Animal & Equine Science – Shone Farm is home to herds of cattle, sheep and horses, and on occasion, as student enterprise projects, flocks of laying hens and broiler birds. Students are actively involved in grooming, lambing, calving, breeding, feeding, marketing, record keeping and maintenance practices.
- Veterinary Technician - Utilizing the livestock resources, veterinary technician students are involved in vaccinating, parasite control, first aid, and general health care practices.
- Sustainable Ag – Crop work includes propagation of plants, planting, weeding, fertilizing, irrigation, composting, harvesting, packing, and marketing and distribution of products.
- Natural Resource Management – Students map and stake out boundaries and trails, work on erosion control, maintenance of new and existing trails, and preservation of the natural forest environment, including fuel reduction.

Culinary Arts Program:

The Culinary Arts Department offers 5 CTE certificates, 2 AA degrees, and due to the California State budget crisis, Ethnic and Specialty Cooking classes were cut to the point where only 2-3 were being offered per semester. When the state budget crisis eased, the District allowed the Department to increase Ethnic and Specialty Cooking class sections beginning in 2013. In 2013, 14 sections of Ethnic and Specialty Cooking classes were offered; in 2014, this increased to 37. These classes are very popular and always well enrolled. In addition to class offerings, the Department runs the Culinary Café and Bakery at the Culinary Arts Center, and participates in numerous food and wine events.

The certificate programs and AA degrees attract a diverse group of students interested in careers in Food Service, Restaurants, Hotels, and Catering. The Ethnic and Specialty cooking classes serve members of the community interested in improving their personal cooking skills, and their health and wellness. These Ethnic and Specialty courses are also electives in the Culinary Major and are taken by many certificate and degree students. Many first time Culinary students take an Ethnic and Specialty class and eventually decide to go through one of the certificate programs. All of the classes in the programs emphasize eating locally, healthfully, and sustainably.

The Department has created and successfully launched the Culinary Career Center. The Center plays an important role in this CTE program by connecting job-seeking students, alumni, and grads to employers. To date, the Center has assisted more than 500 job seekers with finding employment at over 350 northern California employers.

In addition to the academic programs, the department provides a very visible face of the College to the community through the Culinary Café and Bakery.

1.1d Hours of Office Operation and Service by Location

The Agriculture and Natural Resource Department has day and evening classes, Sunday through Saturday on both the Santa Rosa and Petaluma campuses as well as at the Shone Farm in Forestville. Many classes are also offered during weekends.

Additionally the Shone Farm administrative offices would be open M-F, 8-5 pm to assist students, staff and faculty.

The Culinary Arts Department holds classes at three locations:

The Culinary Arts Center

The Dutton Pavilion at Shone Farm

The Department holds classes at the Culinary Arts Center Monday-Friday from 7:00 am-10:00 pm. These classes are mostly part of the Culinary Arts, Baking and Pastry, Front House Operations, Dining Room Service, and Restaurant Management Certificates and Major programs. Additionally, the Department offers Ethnic and Specialty cooking classes designed for the continuing professional and certificate student.

1.2 Program/Unit Context and Environmental Scan

Program/ Unit Context and Environmental Scan:

Agriculture and Natural Resources:

The value of agriculture-related degrees cannot be underestimated. No other industry can feed the world's population that is growing at a rate where we cannot produce enough food for the number of people. It is estimated by World Bank (2013) that by 2050 world's population will grow by 9 billion which will require food production to be doubled.

Currently 21 million American workers produce, process and sell the nation's food and fiber, and the average age of today's farmer is 55.3 years old. Due to imminent retirements and the difference between the current rate of global agriculture productivity and the pace required to meet future needs of our growing world population, graduates in agriculture degree programs are needed. According to the latest data from AgCareers.com, 81% of jobs in the ag industry require education beyond high school and almost half require at least a bachelor's degree. According to the AgCareers.com/AgrowKnowledge Enrollment and Employment Outlook Report in 2013 there was a deficit of 12,000 graduates with agriculture degrees to fill open positions in the US. The USDA also estimates there are or will be 54,500 annual openings for individuals with baccalaureate or higher degrees in food, renewable energy and environmental specialties between 2015 and 2020. The USDA study projected only 53,500 qualified graduates will be available each year and stated that employers have expressed a preference for graduates from colleges of agriculture and natural resources that tend to have more relevant work experience.

Although the US unemployment rates remained high in 2013, AgCareers.com experienced a significant increase in jobs posted on their website. In 2013, AgCareers.com had almost 40,000 job openings posted in the United States (up 16% from the previous year). That is more than 3,300 agriculture-related job openings each month. A recent study conducted by Georgetown University study showed that recent college graduates with degrees in agriculture and natural resources were among those with the lowest unemployment rates in the nation at 7 percent, surpassed only by graduates with degrees in health (5.4 percent) and education (5.4 percent).

Agriculture positions are not only production-based, but encompass a broad range such as sales representatives, research scientists, quality assurance, marketing and engineers, just to name a few. The average starting salary for a graduate in the ag industry is almost \$49,000 (according to the AgCareers.com/AgrowKnowledge Enrollment and Employment Outlook Report and the AgCareers.com Compensation Benchmark Review).

Agriculture is the top economic driver in California and generates over \$46 billion in revenue for the state. According to the California Department for Food and Agriculture, California agriculture is experiencing record growth and production with a 15 percent increase in the sales value of its products in 2013. The state's 81,500 farms and ranches received a record \$46 billion for their output last year, up from the \$43 billion reached during 2012. California remained the number one state in cash farm receipts with 11.6 percent of the US total. The state accounted for 15 percent of national receipts for crops and 7.4 percent of the US revenue for livestock and livestock products. California's agricultural abundance includes more than 400 commodities. The state produces nearly half of US-grown fruits, nuts and vegetables.

The California Community College Centers for Excellence recently completed an environmental scan of the agriculture value chain in California and found that there are currently 2.5 million individuals employed in more than 800 job titles within the agriculture value chain in the state. The average annual salary for agricultural value chain workers in California is \$50,000 (California careers as a whole average \$43,000). While the number of production jobs is expected to decrease in the next five years (due to the increasing efficiencies and mechanization), a net increase of 181,000 jobs is expected throughout the entire agricultural value chain, which includes support, research, technology, production, processing/packaging, marketing, and sales and distribution.

Culinary Arts:

The short and intensive certificate programs in the department allow students to achieve certificates quickly and find employment while continuing their general education. The Department has seen an increase in the number of students working towards a Culinary Arts Major.

The Culinary Arts Department serves over 2,500 students annually. The Department has a successful course completion rate of 82.8% compared to the district average of 71.4%. The Department awards one of the highest number of certificates College-wide.

With the local economy recovering, the department has seen enrollments escalate as new establishments are opening and existing establishments are expanding. The interest in culinary careers continues to skyrocket. Faculty see a great need for the restoration of courses and sections to begin immediately to accommodate both new students and continuing students who are eager to complete their certificate or major and move into the workforce. Currently over 1200 students enrolled in Fall 2014.

The Department sees very few students transferring to 4-year schools because the focus of our programs is on workforce development. The private culinary schools (which used to attract our certificate-holders) charge \$45,000-75,000 for an education equivalent to SRJC's Culinary and Front House programs. SRJC faculty are fully confident that the programs at SRJC are as good or better than the private schools, and no longer advise students to consider that transfer option. The Department is committed to offering affordable training for students to get solid entry-level jobs at which they can quickly move up, and eventually hone their skills over the course of a career.

According to the National Restaurant Association: in 2013 eating establishments accounted for 1,475,100 jobs in California —10% of employment in the state. By 2023, eating establishments in California are projected to employ 1,615,600 people, a 9.5% job growth.

The Culinary department's Career Center and its job-match program has become an indispensable leg of support in helping the Department's students get the jobs for which they are being trained. As ours is the only professional culinary program in Sonoma County, employers have welcomed this service and depend on it for staffing needs. Thanks to the commitment of the job-match coordinator, students and graduates are working in an increasing number of restaurants in the North Bay. In this way the Department is also better able to track student success. The Culinary Career Center has solidified the Department's reputation, and given employers a place to find the competent workforce they seek.

The Department works cooperatively with six local High School Culinary Programs and has Career Pathways in place with most of these schools. The Department articulates its programs, hosts tours for the high school culinary teachers, and hosts informational luncheons for middle school and high school students. Culinary has implemented credit-by-exam for one of the prerequisite lecture courses – Sanitation and Safety - and the Knife Skills course.

The local food, wine, and tourism industries continue to expand through the economy's recovery. According to the Sonoma County Board of Supervisors, "The tourism and hospitality sector was the basis and the backbone of our recovery after the economic downturn in 2008. This sector employs 17,000 workers and annually provides about \$80 million in tax revenue to local government."

Northern California is at the center of the national "locavore" food movement. Sonoma County is the home of over two dozen organizations involved in the promotion of growing, purchasing, cooking and eating local, healthy, sustainable foods (<http://www.igrowsonoma.org>). This movement has provided

impetus to expand sustainable farming practices which helps the local economy and supplies the fresh foods to the restaurant industry as well as the local farmer's markets. "Buying into the Local Food Movement," a consumer study conducted by global management consulting firm A. T. Kearney, assessed how shoppers make decisions about buying local versus non-local food. Results showed that local food is a trend that consumers have embraced and that a strong majority of U.S. consumers will pay a premium to buy local foods; 30 percent say they will take their business elsewhere if a business doesn't offer them. With the move of the Culinary department to the Ag/Natural Resources cluster, we are in step with this growing trend. As the interest in sustainably produced local food grows, the interest in cooking and healthy eating will continue to grow. This growth will continue to keep the Department's enrollments high and demand for new courses even higher.

2.1a Budget Needs

Dean's office, by itself, has a very limited budget from the general fund provided from the District. There are less than \$5000 for discretionary allotment to any emergency program needs.

The department's and Shone Farm's budget needs are presented in the respective PRPPs.

Due to severe budget cuts in the past five years, the operational budget for the department and farm has been reduced significantly. With the economy recovering we are seeing stability in funding in the past year and hope some of these cuts will be restored.

On the positive side, the cluster has been working very diligently to diversify its revenues from non-district general funds. Revenues from Shone Farm and Culinary Cafe have shown healthy gains. We are also aggressively targeting grant funding to support some of our activities. Recent grants from NSF, USDA, State Department, CTE Enhancement, Perkins and NCCPA has provided a boost for the Ag program.

AGTRUST's endowment for the Ag/NR department reached \$1.2 million this year. Interest from this endowment is providing some much needed support for the department.

2.1b Budget Requests

Rank	Location	SP	M	Amount	Brief Rationale
0001	ALL	04	07	\$50,000.00	Enrollment in Ag/NR and CA has been steadily climbing in the past two years putting pressure on limited resources. Funds for supplies and equipments are needed to keep up with the increase in number of lab classes offered.
0002	Shone Farm	04	06	\$25,000.00	Shone Farm's infrastructure - buildings, fence and roads are in need of improvement and repair. Due to poor fencing, we have intrusion from wild animals (cayotes, racoons) attacking the crops

2.2a Current Classified Positions

Position	Hr/Wk	Mo/Yr	Job Duties
Administrative Assistant III	40.00	12.00	Assist Dean of Agriculture, Natural Resources and Culinary Arts office in administrative matters

2.2b Current Management/Confidential Positions

Position	Hr/Wk	Mo/Yr	Job Duties
Shone Farm Manager	40.00	12.00	Manage the various activities and operations at Shone Farm including personnel management. Provide support to conduct of educational activities at the farm.
Pavilion Manager	40.00	12.00	Manage the Dutton Pavilion, rentals, maintenance and manage the pavillion

2.2c Current STNC/Student Worker Positions

Position	Hr/Wk	Mo/Yr	Job Duties
----------	-------	-------	------------

2.2d Adequacy and Effectiveness of Staffing

Shone Farm will need a full-time marketing coordinator to fully utilize its potential. Currently we are managing with part-time STNCs to market CSA, wine and other products. A full-time dedicated marketing coordinator could brand the farm better and increase revenues from products and develop new products and markets.

2.2e Classified, STNC, Management Staffing Requests

Rank	Location	SP	M	Current Title	Proposed Title	Type
0001	Shone Farm	07	07		Shone Farm Marketing Coordinator	Classified

2.3a Current Contract Faculty Positions

Position	Description
----------	-------------

2.3b Full-Time and Part-Time Ratios

Discipline	FTEF Reg	% Reg Load	FTEF Adj	% Adj Load	Description
------------	----------	------------	----------	------------	-------------

2.3c Faculty Within Retirement Range

One faculty in Natural Resource Management expected to go on reduced work load in another 1-2 years.

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

Please see Ag/NR Dept PRPP

2.3e Faculty Staffing Requests

Rank	Location	SP	M	Discipline	SLO Assessment Rationale
------	----------	----	---	------------	--------------------------

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

na

2.4c Instructional Equipment and Software Requests

Rank	Location	SP	M	Item Description	Qty	Cost Each	Total Cost	Requestor	Room/Space	Contact
------	----------	----	---	------------------	-----	-----------	------------	-----------	------------	---------

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

Rank	Location	SP	M	Item Description	Qty	Cost Each	Total Cost	Requestor	Room/Space	Contact
------	----------	----	---	------------------	-----	-----------	------------	-----------	------------	---------

2.5a Minor Facilities Requests

Rank	Location	SP	M	Time Frame	Building	Room Number	Est. Cost	Description
0001	Santa Rosa	04	06	Urgent	Lark Hall Green House		\$60,000.00	Teh green house in Lark Hall needs a new roof. This will gretaly save energy and lead to better plant production and more ideal teaching environment.
0002	Shone Farm	04	07	Urgent	Winery		\$60,000.00	An enclosed area with a roof outside the winery to store all winery equipments. To use as a crush pad and for various winery operations needed for teaching winery practices classes.

2.5b Analysis of Existing Facilities

Please see PRPP for AG.NR, Shone Farm and Culinary Arts

3.1 Develop Financial Resources

Ag/NR has been aggressively seeking grants and contracts and has been quite successful these past two years. New grants from NSF (\$250,000), CCI (\$350,000) and BFRDP (\$275,000) have provided much needed support for the program. Additionally revenues at Shone Farm more than doubled in 2014 to \$1.2 million from \$500,000 in 2012. Gifts and donations to the program have also been steadily increasing both for student scholarships and for equipment needs. Recently we received a \$21,000 gift for an electric cart at Shone Farm and a \$100,000 endowment for scholarship for the viticulture program.

3.2 Serve our Diverse Communities

Ag/CA cluster constantly strives to encourage diversity in all its hiring process. The department has a much higher representation of minorities than in recent years. Our student population is also getting more diverse and faculty and staff are constantly made aware of the need for cultural awareness and competency in the changing workplace.

3.3 Cultivate a Healthy Organization

All our faculty are encouraged to attend professional meetings at least once a year. Professional development and continuing education is critical in the Ag industry to stay current. Funds are made available from AGTRUST and CTEA mini-grants to attend these conferences.

3.4 Safety and Emergency Preparedness

All our facilities - Shone Farm, Lark Hall and Culinary Arts Center have safety coordinators and regularly they are trained in safety exercises and emergency preparedness.

3.5 Establish a Culture of Sustainability

Shone Farm follows sustainability in all its activities leading to water conservation, recycling and composting. Our vineyards and winery are certified sustainable. Our olives and apple fields are certified organic. We recently initiated composting of green waste from campus at Shone Farm. We are incorporating solar energy in certain key projects and will be obtaining an electric passenger moving cart at Shone Farm - all with an eye towards sustainability.

4.1a Course Student Learning Outcomes Assessment

Please refer to Ag/NR and CA department PRPP

4.1b Program Student Learning Outcomes Assessment

Please refer to AG/NR and CA PRPPs

4.1c Student Learning Outcomes Reporting

Type	Name	Student Assessment Implemented	Assessment Results Analyzed	Change Implemented
------	------	--------------------------------	-----------------------------	--------------------

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
----------------	----	----	----	----	----	----	----	----	----	----	----	---	----	----	----	---

4.2b Narrative (Optional)

na

5.0 Performance Measures

na

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

na

5.2a Enrollment Efficiency

na

5.2b Average Class Size

na

5.3 Instructional Productivity

na

5.4 Curriculum Currency

na

5.5 Successful Program Completion

na

5.6 Student Success

na

5.7 Student Access

na

5.8 Curriculum Offered Within Reasonable Time Frame

na

5.9a Curriculum Responsiveness

na

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

na

5.10 Alignment with Transfer Institutions (Transfer Majors ONLY)

na

5.11a Labor Market Demand (Occupational Programs ONLY)

na

5.11b Academic Standards

–

6.1 Progress and Accomplishments Since Last Program/Unit Review

Rank	Location	SP	M	Goal	Objective	Time Frame	Progress to Date
------	----------	----	---	------	-----------	------------	------------------

6.2a Program/Unit Conclusions

Location	Program/Unit Conclusions
----------	--------------------------

6.2b PRPP Editor Feedback - Optional

6.3a Annual Unit Plan

Rank	Location	SP	M	Goal	Objective	Time Frame	Resources Required
------	----------	----	---	------	-----------	------------	--------------------