1. What learning outcome(s) did you assess this year?
   1.1a Explain and identify vine and berry growth stages as it relates to cultural practices
   1.2 Analyze the chemical environment of the grapevine and identify related responses
   1.3 Analyze the physical environment of the grapevine and identify related responses
   1.4 Recognize core cultivars, clones, and rootstocks and compare and contrast their suitability for field, storage, and market/consumer environments
   1.5 Identify core pests and diseases of grapevines, and utilize appropriate measures for control of these pests and diseases.
   2.1 Describe and manage the elements necessary for vineyard planting and propagation.
   2.4 Utilize and manage harvest and post-harvest methods as used in the grape commodity industry.
   2.5 – 2.7 Demonstrate understanding of the wine/raisin/table grape production process, including unique elements of cultural practices and impact on the final product.
   3.2 Manage knowledge and information towards achieving project objectives.
   3.4 Communicate, interpret, and evaluate knowledge effectively through oral, written, and visual mediums.

2. What instruments did you use to assess them?

Vineyard Establishment Report
The Vineyard Establishment Report administered to students in VIT 102: General Viticulture was used for assessment. A sample of 5 of the 15 submitted student reports were redacted, scanned, and distributed to the assessment committee.

Each outcome was evaluated holistically using a four point scale ranging from exceptional detail (3) to not present (0). The expected/satisfactory level of detail for each line was established through discussion of the first student report (Student XI). After independently scoring each report, the committee met once more to harmonize scores. No scores deviated by more than one point among the committee.

Indirect Measures
The graduating student exit survey, recent alumni reflective survey, and industry partners’ survey were administered during the Spring 2016 semester. These indirect assessments provide feedback on the overall status of the program, rather than specific student learning outcomes.
3. What did you discover from these data?

**Vineyard Establishment Report**

Each outcome was evaluated holistically using a four point scale ranging from exceptional detail (3) to not present (0). The benchmark for this rubric was set as 75% of students scoring greater than 2.0 on each rubric item.

![Graph of mean rubric scores](image)

Students failed to meet the department benchmark for all outcomes except 2.1: describe and managed the elements necessary for vineyard planning and propagation. Students feel significantly below the benchmark for 3.2, manage knowledge and information towards achieving project objectives.

The low fraction of students meeting minimum expectations may be due to the small sample size, the alignment of the outcome with assignment directions, or the placement of the assignment within the viticulture curriculum.

Low scores on these rubric lines are distributed between students with each student receiving a 2.5 or better on at least one rubric line and all but one student receiving a score of 1.5 or below on at least one rubric line (data not shown).

Outcomes 1.1a, 1.3, 1.4, 2.1, 2.5-7, and 3.4 showed mean scores of 2 or better. Outcomes 1.2, 1.5, 2.4, and 3.2 all showed mean score below the threshold of 2, and are of particular concern.

Reviewer comments on outcomes 1.2, 1.5, and 2.4 indicate concerns about the level of analysis included in the report rather than the accuracy and clarity of the included information. These deviations appear most likely to relate to the assignment requirements and instructor emphasis rather, limiting their ability to assess student understanding in these areas.

Reviewer comments on outcome 3.2 indicate deficiencies in the selection, use, and particularly citation of appropriate references for the project. While most assignments included a reference list (80%) and used appropriate references (60%), fewer included appropriately formatted in-text citations for critical information (20%) and no students cited the origin of figures and maps used in support of the text.

The assessment committee identified five key areas for potential improvements based on their general observations in reading these student reports:

1. The Viticulture Establishment Report assignment requirements do not sufficiently align with the program student learning outcomes and the location in VIT 102 is not sufficiently close to graduation to provide an accurate assessment of the knowledge and skills of graduating students.
students. A different assignment should be used for assessment of these outcomes in the future.

2. Students tend to list important information without including clear or sufficient analysis and evaluation of the information.

3. Student writing lacks strong organization and structure to communicate the connection of data, its analysis, and student conclusions.

4. Student citation practices are weak in the formatting of citations, when and where citations are used, and particularly the handling and citation of images taken from outside sources or the internet.

5. Student understanding and communication of grapevine pest and disease management was lacking in this assignment. Several students identified potential pest and disease problems, but no students effectively explained the selection of management practices to manage the problems.

**Graduating Student Survey**

Student feedback about the library, incorporation of information literacy instruction in courses, and internship opportunities is overwhelmingly positive. Several students expressed concern about the state of the vineyard facilities and the greenhouse in particular.

Several students commented on the cohesion of the revised curriculum. One student commented, “There is lack of teaching cross-over between classes, teachers don’t understand what we already know and spend time ‘reviewing’ at the detriment of majority of the students.” This survey comment is consistent with discussions during exit interviews and faculty comments which point to unclear and poor sequencing of courses.

A consistent theme in the exit interviews is the need to strengthen the integration of courses and the university agriculture laboratory. The tradition of hands-on education was a major factor for almost every student in selecting Fresno State, yet most feel the program did not live up to that reputation.

**Recent Alumni Survey**

Recent alumni self-rated their preparedness in grapevine anatomy, soil science, irrigation, grape varieties, pests and disease management, vineyard planning, trellising and pruning, mechanization, harvest methods, wine grape production, table grape production, raisin grape production, and business practices. The majority of alumni rated themselves as prepared, well prepared, or very well prepared in all areas except raisin grape production and business practices. Alumni felt better prepared for wine grape production than table or raisin grape production.

Alumni also commented repeatedly on the importance of strengthening the hands-on component of the program.

**Industry Survey**

Industry partners were asked to rank the preparedness of Fresno State graduates relative to other recent hires in the areas of wine and grape chemistry, grapevine anatomy, soil science, irrigation, grape varieties, pests and disease management, vineyard planning, trellising and pruning, mechanization, harvest methods, wine grape production, table grape production, raising grape production, and business practices. All employers ranked our students as average or better with the exception of single respondents ranking as below average (2) in areas of market and business practice, pest and disease management, and irrigation. These rankings are better than the self-rankings of recent alumni, but point to potential areas of improvement.

4. What changes did you make as a result of the findings?
Course Sequencing and Prerequisites – The department is making an effort to improve enforcement of prerequisites which has been poor due to difficulty in students in getting into the classes needed to make timely progress towards their degrees. Specifically, faculty have proposed removing BIOL 161 as a prerequisite for VIT 101 and 102. This change will allow 101 and 102 to be taken earlier in the program and increase flexibility in taking plant health and plant science courses. With these changes in place, faculty will be able to enforce prerequisites without delaying student graduation.

Table and Raisin Grape Production – The department is restructuring the table and raisin grape classes to provide more opportunities for hands-on experience in these courses. These course revisions should strengthen student preparation in table and raisin grape production.

Pest and Disease Management – This academic year, viticulture faculty will be discussing how instruction in this area can be strengthened. Two possibilities are more coverage within existing courses, particularly the general viticulture classes, or replacement of existing courses through plant science with a new Grape Pest and Disease Management class offered within the department.

SOAP Revision – The department is in the process of reviewing and revising VIT 196 Viticulture Projects as a capstone course. This course is taken in student’s last year and is an ideal location for program assessment activities.

5. What assessment activities will you be conducting in the 2016-17 academic year?

In Academic Year 2016/2017, we will be assessing the following outcomes for the B.S. in Viticulture:

1.1 Identify and describe the function of grapevine anatomy
   1.1a Explain and identify vine and berry growth stages as it relates to cultural practices
1.2 Analyze the chemical environment of the grapevine and identify related responses
1.3 Analyze the physical environment of the grapevine and identify related responses
2.2. Define and identify situational use of different training, trellising, and pruning systems
2.3 Define and identify situational use of different vineyard mechanization methods suitable for improving production efficiency
2.4 Utilize and manage harvest and post-harvest methods as used in the grape commodity industries
2.5 Demonstrate understanding of the wine grape production process, including unique elements of cultural practices and impact on final product
2.6 Demonstrate understanding of the raisin grape production process, including unique elements of cultural practices and impact on final product
2.7 Demonstrate understanding of the table grape production process, including unique elements of cultural practices and impact on final product
3.2 Manage knowledge and information towards achieving project objectives
3.3. Synthesize knowledge and information to achieve objectives and products as assigned
3.4 Communicate, interpret, and evaluate knowledge effectively through oral, written, and visual mediums

The method of assessment will be based on Laboratory Reports assigned in VIT 101: General Viticulture I. The three lab reports are intended to serve as introductions to core concepts and practices in viticulture.
Harvest assessment lab This lab is designed to assess student ability to connect vine morphology and anatomy to metrics influencing harvest decisions and practices.

Leaf water potential lab This lab is designed to assess student ability to practice a key method for vineyard management and irrigation practices.

Pruning labs This lab is designed to assess student ability to evaluate and practice pruning methods towards vineyard/crop objectives.

The competencies will have been considered achieved when students score an average of 2 on a rubric scale of 0 (Evidence of Competency not Present) – 3 (Evidence of Competency Provided in Exceptional Detail).

In addition to the direct measure listed above, the Department will also administer a graduating student exit survey, a recent alumni reflective survey, and an industry partners’ survey in Spring 2017. These indirect assessments provide important internal and external feedback on the general status of the program.

6. What progress have you made from your last program review action plan?

Proposal 1 – Replacement of Retired Department Chair
In the Fall 2010 the department hired Dr. James Kennedy who retired, taking a position in industry in the Fall of 2015. The department is currently conducting a search for a new Chair/Director.

Proposal 2 – Addition of Two New Faculty Hires
In the spring of 2012 the department was able to hire Dr. VanZyl as a table grape and raisin specialist. In the fall of 2015, Dr. Kultural left the department for a position with UC Davis Extension. This leaves the department with the need for additional viticulture faculty. The department expects to search for a mechanical viticulture specialist in the 2016-17 academic year.

Proposal 3 – Completing and Expanding Assessment Metrics
The department has submitted a revised SOAP and is currently conducting assessment using this plan. There appear to be several areas for improvement and the department will make revisions to the SOAP as part of reconfiguring the viticulture curriculum.

Proposal 4 – Reconfiguring Viticulture Curriculum
In 2013 the department completed a major overhaul of the viticulture curriculum. Since that revision, faculty have identified the need for further revisions and improvements, particularly to the Viticulture Projects class. The department will continue to work on curriculum alignment with a particular focus on incorporating sustainable assessment.

Proposal 5 – Explore the Possibility of a More Formal Internship Program
The department has added an internship course to the electives for the degree and is working with the Jordan College Advising and Career Development Center on strengthening this program. The department does not intend to require an internship for the degree.
<table>
<thead>
<tr>
<th></th>
<th>3 – Exceptional Detail</th>
<th>2 – Satisfactory Detail</th>
<th>1 – Minimal Detail</th>
<th>0 – Not Present</th>
<th>Comments</th>
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<tbody>
<tr>
<td><strong>1.1a</strong> Explain and identify vine and berry growth stages as it relates to cultural practices</td>
<td></td>
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<tr>
<td><strong>1.2</strong> Analyze the chemical environment of the grapevine and identify related responses</td>
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<tr>
<td><strong>1.3</strong> Analyze the physical environment of the grapevine and identify related responses</td>
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</tr>
<tr>
<td><strong>1.4</strong> Recognize core cultivars, clones, and rootstocks and compare and contrast their suitability for field, storage, and market/consumer environments</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td><strong>1.5</strong> Identify core pests and diseases of grapevines, and utilize appropriate measures for control of these pests and diseases</td>
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<tr>
<td><strong>2.1</strong> Describe and manage the elements necessary for vineyard planning and propagation</td>
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<tr>
<td><strong>2.4</strong> Utilize and manage harvest and post-harvest methods as used in the grape commodity industries</td>
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<tr>
<td><strong>2.5-2.7</strong> Demonstrate understanding of the grape production process, including unique elements of cultural practices and impact on final product</td>
<td></td>
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</tr>
<tr>
<td><strong>3.2</strong> Manage knowledge and information towards achieving project objectives</td>
<td></td>
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<td></td>
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<tr>
<td><strong>3.4</strong> Communicate, interpret, and evaluate knowledge effectively through oral, written, and visual mediums</td>
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14 responses

View all responses   Publish analytics

Summary

What year did you graduate?

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<tr>
<td>2012</td>
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<td>14.3%</td>
</tr>
<tr>
<td>2013</td>
<td>8</td>
<td>57.1%</td>
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<tr>
<td>Other</td>
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What degree did you earn?

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</tr>
<tr>
<td>Bachelor of Science, Viticulture</td>
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<td>21.4%</td>
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<tr>
<td>Double Major</td>
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<td>0%</td>
</tr>
<tr>
<td>Certificate of Enology</td>
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<td>7.1%</td>
</tr>
<tr>
<td>Master of Science in Viticulture and Enology</td>
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<td>7.1%</td>
</tr>
<tr>
<td>Chemistry Minor</td>
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<td>7.1%</td>
</tr>
<tr>
<td>Other</td>
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<td>0%</td>
</tr>
</tbody>
</table>

In what region do you currently work?
Please select all the regions where you have worked

<table>
<thead>
<tr>
<th>Region</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
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<td>28.6%</td>
</tr>
<tr>
<td>California- Central Valley</td>
<td>7</td>
<td>50%</td>
</tr>
<tr>
<td>California- South Valley</td>
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<td>7.1%</td>
</tr>
<tr>
<td>California- Central Coast/Paso Robles</td>
<td>5</td>
<td>35.7%</td>
</tr>
<tr>
<td>Napa Valley Area</td>
<td>6</td>
<td>42.9%</td>
</tr>
<tr>
<td>Sonoma Area</td>
<td>3</td>
<td>21.4%</td>
</tr>
<tr>
<td>Temecula/Coachella Valley</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Oregon</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Washington</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Other</td>
<td>4</td>
<td>28.6%</td>
</tr>
</tbody>
</table>
Grapevine anatomy/vine and berry growth stages [Please consider the following viticultural skills and knowledge areas, and evaluate how well Fresno State prepared you to use these skills in your professional work.]

1- Not prepared at all 0 0%
2- Somewhat prepared 1 7.1%
3- Prepared 5 35.7%
4- Well prepared 2 14.3%
5- Very well prepared 6 42.9%
N/A 0 0%

Soil science [Please consider the following viticultural skills and knowledge areas, and evaluate how well Fresno State prepared you to use these skills in your professional work.]

1- Not prepared at all 0 0%
2- Somewhat prepared 5 35.7%
3- Prepared 3 21.4%
4- Well prepared 3 21.4%
5- Very well prepared 3 21.4%
N/A 0 0%
Irrigation [Please consider the following viticultural skills and knowledge areas, and evaluate how well Fresno State prepared you to use these skills in your professional work.]

1- Not prepared at all 1 7.1%
2- Somewhat prepared 5 35.7%
3- Prepared 3 21.4%
4- Well prepared 3 21.4%
5- Very well prepared 2 14.3%
N/A 0 0%

Varieties, clones, and rootstocks [Please consider the following viticultural skills and knowledge areas, and evaluate how well Fresno State prepared you to use these skills in your professional work.]

1- Not prepared at all 0 0%
2- Somewhat prepared 2 14.3%
3- Prepared 7 50%
4- Well prepared 1 7.1%
5- Very well prepared 4 28.6%
N/A 0 0%
Pests and disease [Please consider the following viticultural skills and knowledge areas, and evaluate how well Fresno State prepared you to use these skills in your professional work.]

1- Not prepared at all 0 0%
2- Somewhat prepared 3 21.4%
3- Prepared 5 35.7%
4- Well prepared 3 21.4%
5- Very well prepared 3 21.4%
N/A 0 0%

Vineyard planning/propagation [Please consider the following viticultural skills and knowledge areas, and evaluate how well Fresno State prepared you to use these skills in your professional work.]

1- Not prepared at all 0 0%
2- Somewhat prepared 5 35.7%
3- Prepared 3 21.4%
4- Well prepared 3 21.4%
5- Very well prepared 3 21.4%
N/A 0 0%
Training, trellising, and pruning [Please consider the following viticultural skills and knowledge areas, and evaluate how well Fresno State prepared you to use these skills in your professional work.]

- 1- Not prepared at all: 1 (7.1%)
- 2- Somewhat prepared: 1 (7.1%)
- 3- Prepared: 2 (14.3%)
- 4- Well prepared: 4 (28.6%)
- 5- Very well prepared: 6 (42.9%)
- N/A: 0 (0%)

Vineyard mechanization (pruning, canopy management, harvesting, etc...) [Please consider the following viticultural skills and knowledge areas, and evaluate how well Fresno State prepared you to use these skills in your professional work.]

- 1- Not prepared at all: 0 (0%)
- 2- Somewhat prepared: 4 (28.6%)
- 3- Prepared: 1 (7.1%)
- 4- Well prepared: 5 (35.7%)
- 5- Very well prepared: 3 (21.4%)
- N/A: 1 (7.1%)

Harvest/post-harvest methods [Please consider the following viticultural skills and
knowledge areas, and evaluate how well Fresno State prepared you to use these skills in your professional work.]

Wine grape production [Please consider the following viticultural skills and knowledge areas, and evaluate how well Fresno State prepared you to use these skills in your professional work.]

Table grape production [Please consider the following viticultural skills and knowledge areas, and evaluate how well Fresno State prepared you to use these skills in your professional work.]
1- Not prepared at all 2 14.3%  
2- Somewhat prepared 3 21.4%  
3- Prepared 3 21.4%  
4- Well prepared 1 7.1%  
5- Very well prepared 2 14.3%  
N/A 3 21.4%  

Raisin grape production [Please consider the following viticultural skills and knowledge areas, and evaluate how well Fresno State prepared you to use these skills in your professional work.]

1- Not prepared at all 3 21.4%  
2- Somewhat prepared 3 21.4%  
3- Prepared 2 14.3%  
4- Well prepared 0 0%  
5- Very well prepared 2 14.3%  
N/A 3 21.4%  

Market and business practices [Please consider the following viticultural skills and knowledge areas, and evaluate how well Fresno State prepared you to use these skills in your professional work.]
Please comment on how the Department of Viticulture and Enology at Fresno State could improve their viticulture education:

From an enology degree standpoint of view, I feel that the training I received in viticulture from my time at Fresno State (2010-2013) was more than adequate.

Management/leadership Spanish Discuss the career options and compensation expectations
Have an instructor actually show up to a class
Have more industry speakers from different fields such as Vineyard Management, Grower Relations, Pest Control, etc.
Keep the full lab time out in the vineyard
Wish some of the professors were more focused on the students then their research but that professor left already. Possibly offering some summer classes so you can be in the vineyard when everything is happening.

Wine microbiology [Please consider the following enological skills and knowledge areas, and evaluate how well Fresno State prepared you to use these skills in your professional work.]
Wine and grape chemistry [Please consider the following enological skills and knowledge areas, and evaluate how well Fresno State prepared you to use these skills in your professional work.]

Sensory/organoleptic practices [Please consider the following enological skills and knowledge areas, and evaluate how well Fresno State prepared you to use these skills in your professional work.]
Wine analysis [Please consider the following enological skills and knowledge areas, and evaluate how well Fresno State prepared you to use these skills in your professional work.]

- 1- Not prepared at all: 0 (0%)
- 2- Somewhat prepared: 3 (21.4%)
- 3- Prepared: 0 (0%)
- 4- Well prepared: 5 (35.7%)
- 5- Very well prepared: 4 (28.6%)
- N/A: 2 (14.3%)

Grape quality identification [Please consider the following enological skills and knowledge areas, and evaluate how well Fresno State prepared you to use these skills in your professional work.]

- 1- Not prepared at all: 0 (0%)
- 2- Somewhat prepared: 3 (21.4%)
- 3- Prepared: 0 (0%)
- 4- Well prepared: 5 (35.7%)
- 5- Very well prepared: 4 (28.6%)
- N/A: 2 (14.3%)
Grape varieties [Please consider the following enological skills and knowledge areas, and evaluate how well Fresno State prepared you to use these skills in your professional work.]

1- Not prepared at all 0 0%
2- Somewhat prepared 0 0%
3- Prepared 5 35.7%
4- Well prepared 3 21.4%
5- Very well prepared 4 28.6%
N/A 2 14.3%

Wine varietals [Please consider the following enological skills and knowledge areas, and evaluate how well Fresno State prepared you to use these skills in your professional work.]

1- Not prepared at all 0 0%
2- Somewhat prepared 0 0%
3- Prepared 6 42.9%
4- Well prepared 3 21.4%
5- Very well prepared 4 28.6%
N/A 1 7.1%
Fermentation practices [Please consider the following enological skills and knowledge areas, and evaluate how well Fresno State prepared you to use these skills in your professional work.]

1- Not prepared at all 0 0%
2- Somewhat prepared 0 0%
3- Prepared 7 50%
4- Well prepared 2 14.3%
5- Very well prepared 4 28.6%
N/A 1 7.1%

Cellaring practices [Please consider the following enological skills and knowledge areas, and evaluate how well Fresno State prepared you to use these skills in your professional work.]

1- Not prepared at all 0 0%
2- Somewhat prepared 2 14.3%
3- Prepared 2 14.3%
4- Well prepared 3 21.4%
5- Very well prepared 5 35.7%
N/A 2 14.3%
### Blending

[Please consider the following enological skills and knowledge areas, and evaluate how well Fresno State prepared you to use these skills in your professional work.]

<table>
<thead>
<tr>
<th>Level</th>
<th>Score</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1- Not prepared at all</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>2- Somewhat prepared</td>
<td>5</td>
<td>35.7%</td>
</tr>
<tr>
<td>3-Prepared</td>
<td>4</td>
<td>28.6%</td>
</tr>
<tr>
<td>4- Well prepared</td>
<td>1</td>
<td>7.1%</td>
</tr>
<tr>
<td>5- Very well prepared</td>
<td>2</td>
<td>14.3%</td>
</tr>
<tr>
<td>N/A</td>
<td>2</td>
<td>14.3%</td>
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</tbody>
</table>

### Bottling/packaging

[Please consider the following enological skills and knowledge areas, and evaluate how well Fresno State prepared you to use these skills in your professional work.]

<table>
<thead>
<tr>
<th>Level</th>
<th>Score</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>1- Not prepared at all</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>2- Somewhat prepared</td>
<td>4</td>
<td>28.6%</td>
</tr>
</tbody>
</table>
Winery technology [Please consider the following enological skills and knowledge areas, and evaluate how well Fresno State prepared you to use these skills in your professional work.]

1- Not prepared at all 0 0%
2- Somewhat prepared 6 42.9%
3- Prepared 0 0%
4- Well prepared 3 21.4%
5- Very well prepared 3 21.4%
N/A 2 14.3%

Regulations [Please consider the following enological skills and knowledge areas, and evaluate how well Fresno State prepared you to use these skills in your professional work.]

1- Not prepared at all 0 0%
2- Somewhat prepared 4 28.6%
3- Prepared 5 35.7%
Market and business practices [Please consider the following enological skills and knowledge areas, and evaluate how well Fresno State prepared you to use these skills in your professional work.]

Please comment on how the Department of Viticulture and Enology at Fresno State could improve their enology education:

I truly believe the focus on chemistry and cellar work was by far the strengths of the program. My many chemistry classes, as much as I hated them, helped me understand the wine matrix and grape’s asynchronous development. My time and effort in the cellar paid off in huge when I got my first job. Overall I feel that the classes I had to take and the amount of cellar time I put into Fresno State’s winery helped me become a functioning member of a wine making team right out of school. In particular, I felt John's Enol164, Ken's enol45, Roy's Enol125 and Jame's enol162T were what made my education so great at Fresno State. Of course the Vit side was good too along with all the classes needed to help me understand and appreciated those specific classes mentioned.

Include ultrafiltration, distillation, and emerging technology

Cellar ops should be a lab class requiring the application of things like sulfur monitoring and dosage, and remediation of issues in the cellar should be discussed in a manner applicable to smaller wineries (<50000 cases). Of the thousands of wineries in CA the large majority are small producers. Forklift operation should be taught to every enology student. Cellar planning/scheduling should be focused on at some point though expertise and time may not be
available. Velcorin needs to be covered in depth. More time spent handling barrels including maintenance and repair is absolutely necessary. Once wine was barreled down students didn’t touch it while I attended, but 90% of the life of a wine in any “small winery” cellar is spent in barrel. Students need opportunities to clean, store, repair and maintain the most important wine vessel in the industry. Certainly at Bronco, Gallo, and other large wineries enologists and associate winemakers won’t touch them, however at all the smaller wineries knowing these things give one a leg up on the 10 other interns doing pump overs and punch downs which leads to full time employment opportunities.

Bring back the wine regulations class and offer more business electives.

More practice with lab equipment

I was a viticulture major so I didn’t have that much experience with the Enology aspect of the program but the classes I did have to take where great.

**Vineyard [Please consider the following facilities, and evaluate how well these facilities prepared you for your professional work.]**

1- Not prepared at all 0 0%
2- Somewhat prepared 3 21.4%
3- Prepared 5 35.7%
4- Well prepared 1 7.1%
5- Very well prepared 5 35.7%
N/A 0 0%

**Winery [Please consider the following facilities, and evaluate how well these facilities prepared you for your professional work.]**
**Greenhouse** [Please consider the following facilities, and evaluate how well these facilities prepared you for your professional work.]

1- Not prepared at all 2 14.3%
2- Somewhat prepared 3 21.4%
3- Prepared 4 28.6%
4- Well prepared 0 0%
5- Very well prepared 1 7.1%
N/A 4 28.6%

**Raisin Processing Plant** [Please consider the following facilities, and evaluate how well these facilities prepared you for your professional work.]

1- Not prepared at all 2 14.3%
2- Somewhat prepared 3 21.4%
3- Prepared 4 28.6%
4- Well prepared 0 0%
5- Very well prepared 1 7.1%
N/A 4 28.6%
1- Not prepared at all  3  21.4%
2- Somewhat prepared  4  28.6%
  3- Prepared  0  0%
  4- Well prepared  0  0%
5- Very well prepared  2  14.3%
N/A  5  35.7%

**Classroom Laboratories** [Please consider the following facilities, and evaluate how well these facilities prepared you for your professional work.]

1- Not prepared at all  0  0%
2- Somewhat prepared  1  7.1%
  3- Prepared  7  50%
  4- Well prepared  1  7.1%
5- Very well prepared  4  28.6%
N/A  1  7.1%

**V.E. Petrucci Library** [Please consider the following facilities, and evaluate how well these facilities prepared you for your professional work.]

1- Not prepared at all  1  7.1%
Please comment on how the Department of Viticulture and Enology at Fresno State could improve their leadership and practical skills education:

Well first i'd like to express that I hope chemistry is still important, Dr. Thornton is still holding high standards in wine micro and students are still being pressed to volunteer as much as they can in the cellar. If they can't come into a harvest job and do routine cellar work, then they have nothing to put them above any other school's graduates. I feel Fresno State should continue to play to their strengths. That is putting graduates in the market that can work right out of the gates. Its great if that graduate knows all about how sulfur is pH dependent and how wine tannin can be managed over time. That's good for personal and professional development into a eventual winemaker position. But for their first job, they should know how to do routine cellar operations and wine analysis with minimal supervision. I've dealt with many interns from different schools and they all had one thing in common. It took a lot of effort and time to teach them how to perform basic cellar or lab operations. Time is not something most wineries that are below 50K cases have to invest into someone. The less time and effort I have to put into someone, the more likely I am to keep that person.

I think the practical hands on education was strong

How viticulture affects a wine

Nothing can be done. With two clubs opportunities for leadership development abound. Students don't realize how critical that element is.

Continue to have more jobs to offer online and keep up to date as well as have a better alumni program which helps us out to continue to be better in our industry.

None

I have no idea

Do a class on specific wine varieties and how to treat them instead of fermenting everything the same.

Need to continue to focus on research. Need to expand focus on higher end growing regions. Need to secure top notch wine professionals that have had success building world class brands.

Need to challenge current students even harder with the rigors of the chemistry, biochemistry, microbiology, physics, and have more winery design (practical). Need to bring back field studies.

Need to train students to drive a forklift with stacking bins, stacking barrels, and case goods.

Provide more mandatory courses about professional development. Resume and cover letter writing, mock interviews, mandatory internships for course credit, etc.

The facilities are great. Wish the greenhouse was able to move forward as I know a lot of people and past students on the viticulture club put in a lot of time an effort on the project. Also I know money was donated towards the project as well.
How would you evaluate your education in the Department of Viticulture and Enology at Fresno State overall?

I would like to add that Fresno State didn't offer me a whole lot about the wine market and sales so much, but that's okay. Maybe an optional class would be good but doesn't need to be required. I would like to mention a few things to be passed on to students. It's a very competitive field. There's a lot of graduates coming out of several schools that have legitimate degrees and knowledge about theory. Fresno State also offers practice. This should be taken advantage of as much as possible. That is what is going to make you stand out during an interview. Also, for the most part, the wine industry is pretty relaxed. But not until you're in it. That means clean, legible cover letters and resumes. Also don't dress like hobos for interviews. Polish and shine yourselves up and show some ambition about joining a team. Take things serious because there's plenty of bodies out there trying to land that one job as well.

I wish I had learned more viticulture.

I treasure the time I spent at CSU Fresno. It prepared me to step directly into a management position. What I hear from employers who have graduated from competing programs is that CSUF panders to large production, which I have found to be true to an extent. More focus on barrels from a practical standpoint, and a forklift certification would have filled all the knowledge gaps I've run into that didn't require experience and terroir.

I have found even with education and experience people still hire who they know.

When I was a student at Fresno State I felt like I got an exceptional education. Was a great university and the staff was great. I know a lot has happened since I have left and I hope it will bounce back from the loss of valuable professors. Hopefully they are able to fill the positions quickly so the students don't suffer that much.

Any further thoughts you have on your education from the Department of Viticulture and Enology at Fresno State?

I wish I had learned more viticulture.

I wish I had learned more viticulture.
10 responses

Summary

What is your industry sector?

- Raisin grape production: 0 (0%)
- Table grape production: 0 (0%)
- Wine grape production: 3 (30%)
- Winery (less than 200,000 cases per year): 3 (30%)
- Winery (more than 200,000 cases per year): 4 (40%)
- Laboratory: 0 (0%)
- Other: 0 (0%)

Where is your company located?

- California - North Valley: 1 (10%)
- California - Central Valley: 3 (30%)
- California - South Valley: 0 (0%)
- California - Central Coast/Paso Robles: 1 (10%)
- Napa Valley Area: 4 (40%)
- Sonoma Area: 0 (0%)
- Oregon: 0 (0%)
How many full-time, year-round employees work in your company?

- Less than 10: 2 (20%)
- 11-50: 4 (40%)
- 51-100: 0 (0%)
- 101-500: 0 (0%)
- 501-999: 0 (0%)
- 1,000 or more: 4 (40%)

How many graduates of the Department of Viticulture and Enology at Fresno State have you employed in the last five years?

- Zero: 0 (0%)
- 1-2: 2 (20%)
- 3-4: 4 (40%)
- 5-6: 3 (30%)
- 7 or more: 0 (0%)
- Other: 1 (10%)

Have you employed graduates of other viticulture and enology programs?

- Yes: 8 (80%)
- No: 2 (20%)

If yes, which program(s)?

- UC Davis
- Cal Poly- Sa...
- Oregon State...
- Washington...
- Other
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<td>Washington State University</td>
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<tr>
<td>Other</td>
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**Wine microbiology** [Please evaluate the enological knowledge and skills of your Fresno State alumni employees:]

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<td>22.2%</td>
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<td>5 - Far above average</td>
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<td>11.1%</td>
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<td>N/A</td>
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<td>44.4%</td>
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**Wine and grape chemistry** [Please evaluate the enological knowledge and skills of your Fresno State alumni employees:]

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<tr>
<td>N/A</td>
<td>4</td>
<td>44.4%</td>
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</tbody>
</table>
Sensory/organoleptic practices [Please evaluate the enological knowledge and skills of your Fresno State alumni employees:]

Wine analysis [Please evaluate the enological knowledge and skills of your Fresno State alumni employees:]
Grape quality identification [Please evaluate the enological knowledge and skills of your Fresno State alumni employees:]

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<td>N/A</td>
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Grape varieties [Please evaluate the enological knowledge and skills of your Fresno State alumni employees:]

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<tr>
<td>Far above average</td>
<td>3</td>
<td>30%</td>
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<tr>
<td>N/A</td>
<td>0</td>
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</tbody>
</table>
Wine varietals [Please evaluate the enological knowledge and skills of your Fresno State alumni employees:]

1- Far below average 0 0%
2- Below average 0 0%
3- Average 4 40%
4- Above average 3 30%
5- Far above average 3 30%
N/A 0 0%

Fermentation practices [Please evaluate the enological knowledge and skills of your Fresno State alumni employees:]

1- Far below average 0 0%
2- Below average 0 0%
3- Average 2 20%
4- Above average 4 40%
5- Far above average 1 10%
N/A 3 30%

Cellaring practices [Please evaluate the enological knowledge and skills of your Fresno State alumni employees:]

1- Far below average 0 0%
2- Below average 0 0%
3- Average 2 20%
4- Above average 4 40%
5- Far above average 3 30%
Blending [Please evaluate the enological knowledge and skills of your Fresno State alumni employees:]

1- Far below average 0 0%
2- Below average 0 0%
3- Average 1 11.1%
4- Above average 1 11.1%
5- Far above average 3 33.3%
N/A 4 44.4%

Bottling/packaging [Please evaluate the enological knowledge and skills of your Fresno State alumni employees:]

1- Far below average 0 0%
2- Below average 1 10%
3- Average 2 20%
4- Above average 3 30%
5- Far above average 0 0%
N/A 4 40%
Winery technology [Please evaluate the enological knowledge and skills of your Fresno State alumni employees:]

1- Far below… 0 0%
2- Below average 0 0%
3- Average 5 55.6%
4- Above average 0 0%
5- Far above average 0 0%
N/A 4 44.4%

Regulations [Please evaluate the enological knowledge and skills of your Fresno State alumni employees:]

1- Far below average 0 0%
2- Below average 0 0%
3- Average 2 20%
4- Above average 4 40%
5- Far above average 0 0%
N/A 4 40%
Market and business practices [Please evaluate the enological knowledge and skills of your Fresno State alumni employees:]

Grapevine anatomy/vine and berry growth stages [Please evaluate the viticultural knowledge and skills of your Fresno State alumni employees:]
Soil science [Please evaluate the viticultural knowledge and skills of your Fresno State alumni employees:]

1- Far below average 0 0%
2- Below average 0 0%
3- Average 4 40%
4- Above average 5 50%
5- Far above average 0 0%
N/A 1 10%

Irrigation [Please evaluate the viticultural knowledge and skills of your Fresno State alumni employees:]

1- Far below average
2- Below average
3- Average
4- Above average
5- Far above average
N/A
Varieties, clones, and rootstocks [Please evaluate the viticultural knowledge and skills of your Fresno State alumni employees:]

- Far below average: 0 (0%)
- Below average: 0 (0%)
- Average: 4 (40%)
- Above average: 3 (30%)
- Far above average: 1 (10%)

N/A: 1 (10%)

Pests and disease [Please evaluate the viticultural knowledge and skills of your Fresno State alumni employees:]

- Far below average: 0 (0%)
- Below average: 0 (0%)
- Average: 5 (50%)
- Above average: 3 (30%)
- Far above average: 1 (10%)

N/A: 1 (10%)
Below average 1 10%
3- Average 6 60%
4- Above average 1 10%
5- Far above average 1 10%
N/A 1 10%

Vineyard planning/propagation [Please evaluate the viticultural knowledge and skills of your Fresno State alumni employees:]

1- Far below average 0 0%
2- Below average 0 0%
3- Average 5 50%
4- Above average 2 20%
5- Far above average 1 10%
N/A 2 20%

Training, trellising, and pruning [Please evaluate the viticultural knowledge and skills of your Fresno State alumni employees:]

1- Far below average 0 0%
2- Below average 0 0%
3- Average 6 60%
Vineyard mechanization (pruning, canopy management, harvesting, etc...) [Please evaluate the viticultural knowledge and skills of your Fresno State alumni employees:]

Harvest/post-harvest methods [Please evaluate the viticultural knowledge and skills of your Fresno State alumni employees:]
**Wine grape production** [Please evaluate the viticultural knowledge and skills of your Fresno State alumni employees:]

- Far below average: 0 (0%)
- Below average: 0 (0%)
- Average: 5 (50%)
- Above average: 4 (40%)
- Far above average: 0 (0%)
- N/A: 1 (10%)

**Table grape production** [Please evaluate the viticultural knowledge and skills of your Fresno State alumni employees:]

- Far below average: 0 (0%)
- Below average: 0 (0%)
- Average: 3 (30%)
- Above average: 2 (20%)
- Far above average: 0 (0%)
- N/A: 5 (50%)
Raisin grape production [Please evaluate the viticultural knowledge and skills of your Fresno State alumni employees:]

1- Far below average 0 0%
2- Below average 0 0%
3- Average 3 30%
4- Above average 1 10%
5- Far above average 1 10%
N/A 5 50%

Market and business practices [Please evaluate the viticultural knowledge and skills of your Fresno State alumni employees:]

1- Far below average 0 0%
2- Below average 1 11.1%
3- Average 4 44.4%
4- Above average 1 11.1%
5- Far above average 0 0%
N/A 3 33.3%

Oral communication [Please evaluate the leadership skills and practical knowledge of your Fresno State alumni employees:]

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**Written communication** [Please evaluate the leadership skills and practical knowledge of your Fresno State alumni employees:]

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<td>3- Average</td>
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<td>4- Above average</td>
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<td>5- Far above average</td>
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**Presentation skills** [Please evaluate the leadership skills and practical knowledge of your Fresno State alumni employees:]

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<td>5- Far above average</td>
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<td>N/A</td>
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</table>
Interpersonal skills [Please evaluate the leadership skills and practical knowledge of your Fresno State alumni employees:]

1. Far below average: 0 (0%)
2. Below average: 0 (0%)
3. Average: 3 (30%)
4. Above average: 5 (50%)
5. Far above average: 0 (0%)
N/A: 2 (20%)

Management [Please evaluate the leadership skills and practical knowledge of your Fresno State alumni employees:]

1. Far below average: 0 (0%)
2. Below average: 0 (0%)
3. Average: 5 (50%)
4. Above average: 5 (50%)
5. Far above average: 0 (0%)
N/A: 0 (0%)
Leadership [Please evaluate the leadership skills and practical knowledge of your Fresno State alumni employees:]

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<td>6</td>
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<tr>
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<td>1</td>
<td>10%</td>
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<tr>
<td>N/A</td>
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Research and information finding [Please evaluate the leadership skills and practical knowledge of your Fresno State alumni employees:]

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Critical thinking [Please evaluate the leadership skills and practical knowledge of your Fresno State alumni employees:]

1- Far below average 0 0%
2- Below average 0 0%
3- Average 5 50%
4- Above average 4 40%
5- Far above average 1 10%
N/A 0 0%

Project management [Please evaluate the leadership skills and practical knowledge of your Fresno State alumni employees:]

1- Far below average
2- Below average
3- Average 5 50%
4- Above average 4 40%
5- Far above average
N/A
1- Far below average | 0 | 0%
2- Below average | 0 | 0%
3- Average | 7 | 70%
4- Above average | 3 | 30%
5- Far above average | 0 | 0%
N/A | 0 | 0%

Machinery skills [Please evaluate the leadership skills and practical knowledge of your Fresno State alumni employees:]

1- Far below average | 0 | 0%
2- Below average | 0 | 0%
3- Average | 3 | 30%
4- Above average | 4 | 40%
5- Far above average | 1 | 10%
N/A | 2 | 20%

Computer skills [Please evaluate the leadership skills and practical knowledge of your Fresno State alumni employees:]

1- Far below average | 0 | 0%
Laboratory skills [Please evaluate the leadership skills and practical knowledge of your Fresno State alumni employees:]

How would you compare the overall performance of your Department of Viticulture and Enology at Fresno State alumni employees?

1- Far below average 0 0%
2- Below average 0 0%
3- Average 4 40%
4- Above average 2 20%
5- Far above average 1 10%
N/A 3 30%
What additional areas do you believe Department of Viticulture and Enology at Fresno State alumni employees could benefit from training/education in?

Fork lift training and bottling line sanitation
The regulations class should be mandatory.
Sensory evaluation
More technical/analytical computer skills exposure
I believe they have a general entomology class, but I think another class (junior or senior year) that is more specific to grape pests and diseases would be helpful. In addition, I would like to see them have a better understanding in the area of grapevine nutrition. That would include key nutrients and their function, and how to design a properly timed program. Knowledge of cover crops/compost would be helpful as well. This would help to develop students with the type of practical knowledge that the program has been known for.

In general graduates have been well rounded. I selected lots of average, because overall competency has been solid. above average can come from anywhere and has more to do with intelligence and drive of the individual than it does with the education.

Spanish language skills
Real-life winery work experience.
continue to push the current skill sets, but enforce the practical learning side of it though it is difficult with today's students.

I do not know at this time what is needed by the remaining staff or the new staff coming in.

What areas of technology or equipment do you believe Department of Viticulture and Enology at Fresno State alumni employees could benefit from training/education in? What upcoming technology skills will be necessary for grape and wine industry employees?

Cross flow filtration and centrifuge
Get everybody on the forklift
Forklift
Use of drones in ag
GPS and GIS knowledge. Also an introduction to aerial imagery (TerrAvion) and any new advances in irrigation technology.
a lot of the applied research and studies that students can do at davis seems to help. any applied/field work help one connect their education more directly to their profession.
Some sort of mandatory internship should be put in place to broaden a students concept of actual industry practices.
More training in Microsoft/Excel.
Vineyard mechanization.
I understand the lab left behind by Kaan left a great lab worth $2 million if it had to be replaced today. again I do not know what computer systems we have nor what we need to answer this question.
Please share any further thoughts you have on your Department of Viticulture and Enology at Fresno State alumni employees:

Our winery is looking for trainable and flexible employees. Each winery has slightly different operating procedures, so we want someone that will follow directions and do things how we want them done.

Encourage them to work at wineries in Napa Valley!

I would like to see the students taking advantage of summer internship opportunities. I see many resumes from Fresno, Davis and Cal Poly junior or senior year students that have never worked in a vineyard before.

this has been a successful program and produced some solid professionals. i should still. much smaller than ucd and how to develop and maintain the program is a challenge. great leadership and vision is necessary. identify what one does best and do it. one can’t be all things to all people.

WE need to take advantage of this time and opportunity to rebuild the Department into a first class world renowned Department for the Students first, the University and the Industry.

What is your general impression of the Department of Viticulture and Enology at Fresno State?

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<tbody>
<tr>
<td>Very Negative</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Somewhat Negative</td>
<td>2</td>
<td>20%</td>
</tr>
<tr>
<td>Neutral</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Somewhat Positive</td>
<td>4</td>
<td>40%</td>
</tr>
<tr>
<td>Very Positive</td>
<td>4</td>
<td>40%</td>
</tr>
</tbody>
</table>

Any other thoughts or feedback you would like to share?

Department needs stronger board leadership to "clean house" regarding ineffective employees and quit losing the good employees

I know the department has been in limbo with key staff that have left. I would like to see it get back to a program focused on developing students with a sound scientific knowledge who are practically prepared to work in today’s modern industry. Research is important, but in my opinion should not be the key focus of the program.

bummer to have lost the solid program leadership that was in place. the winery eduction with vineyard exposure and education is very important.

Must get a department head in and rebuild the program from there.

Number of daily responses
Summary

Which degree did you earn at Fresno State?

- BS Viticulture: 2 (22.2%)
- BS Enology: 5 (55.6%)
- BS Viticulture and Enology: 0 (0%)
- Certificate in Enology: 1 (11.1%)
- MS Viticulture and Enology: 1 (11.1%)

How long did it take you to complete your degree OVERALL?

- 4 years or less: 3 (33.3%)
- More than 4 years but less than 5 years: 4 (44.4%)
- More than 5 years but less than 6 years: 2 (22.2%)
- More than 6 years: 0 (0%)

How many semesters did you attend Fresno State?

- 1 - 2: 0 (0%)
- 3 - 4: 1 (11.1%)
What was your reason for selecting Fresno State?

Being able to select a faculty with similar experience and interests as mine (Tannin chemistry)

It has a good reputation in the industry for its enology program

I selected Fresno State because of the practical, hands on experience you get both in the classroom and in the winery.

It has been known as one of the best enology programs in the country.

Their historic and industry recognized program. As well as Fresno States hand-on philosophy, and opportunity to do practical research.

I was at Cal Poly before, but they wouldn't let me switch. Fresno State was the only school that had a Viticulture degree and was supposed to be the best school for hands on agriculture. I heard good things about the school at that time.

Fresno State is considered a very good school for many subjects. It isn't too far or near from home. The agriculture college has had various recognitions.

It was the only school that offered something like the certificate program. However I had been looking at a second undergrad degree when I discovered that in California you can't get a second bachelors. Since I have a B.A. in music with no science background, I didn't feel like I would qualify for the masters program either. So the certificate was a good fit. But I was strongly considering FS anyway due to its strong industry reputation and on a couple of first hand recommendations from former program grads.

**COURSEWORK**

How did you learn about our program?

Online search

From industry professionals.

I received a small scholarship to attend Fresno majoring in Enology when I was a Freshman in high school.

High school outreach.

The Santa Rosa Junior College Enology Program, and from Industry alumni

Through friends and people working in the Vit/Enol field.

I learned about the program from alumni.

I was doing research on enology programs. Plus I already knew FS had a good one.
How would you rate the level of difficulty of the coursework overall?

1 - Not difficult at all  1  11.1%
2 - Somewhat difficult  2  22.2%
3 - Moderately difficult  6  66.7%
4 - Very difficult  0  0%

How well do you think the content of the courses you completed has prepared you for your future in the grape and/or wine industry?

1 - I feel the course content is exactly what I need to know to perform my future job  3  33.3%
2 - I am prepared but I believe the coursework should have covered additional topics  3  33.3%
3 - There are several areas I feel the coursework should have covered additional topics  3  33.3%
4 - I do not think the coursework content was relevant at all to a job in the grape and/or wine industry  0  0%

If you believe there were deficiencies in the course content offered in the Department, please describe those deficiencies?

courses should emphasize more on the scientific rather than the technical side of topics, which can be learned working for the industry (internships, ...etc)

Some practical hands on experience with a production/ record keeping program such as wine makers database would have been helpful. Also more time working on analysis in the lab would have been helpful- just to have more than one lab period to learn each test.

Their is lack of teaching cross over between classes, teacher don't understand what we already know and spend time “reviewing” at the detriment of majority of the students. The catalog change was not handled properly and some of the wine business and management courses are poorly structured and half-assly instructed. The production coarse this year lacked lab aspects and was very poorly managed with the instructor instilling practices that we are taught NOT to do in other
courses from more creditable professors. I am scared for the coming graduating class because they are receiving a poorer education than I.

This would be better by having a conversation in person.

**How valuable is an internship for the program?**

![Value Pie Chart]

<table>
<thead>
<tr>
<th>Rating</th>
<th>Count</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>1 - Very valuable</td>
<td>8</td>
<td>88.9%</td>
</tr>
<tr>
<td>2 - Somewhat valuable</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>3 - Neutral</td>
<td>1</td>
<td>11.1%</td>
</tr>
<tr>
<td>4 - Somewhat dispensable</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>5 - Very dispensable</td>
<td>0</td>
<td>0%</td>
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</table>

**How satisfied are you with the internship opportunities offered by the program?**

![Satisfaction Pie Chart]

<table>
<thead>
<tr>
<th>Rating</th>
<th>Count</th>
<th>Percentage</th>
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</thead>
<tbody>
<tr>
<td>1 - Very satisfied</td>
<td>3</td>
<td>33.3%</td>
</tr>
<tr>
<td>2 - Somewhat satisfied</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>3 - Satisfied</td>
<td>4</td>
<td>44.4%</td>
</tr>
<tr>
<td>4 - Somewhat dissatisfied</td>
<td>1</td>
<td>11.1%</td>
</tr>
<tr>
<td>5 - Very dissatisfied</td>
<td>1</td>
<td>11.1%</td>
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**LIBRARY SERVICES**

**How would you rate the V.E. Petrucci Library services and resources?**

<table>
<thead>
<tr>
<th>Rating</th>
<th>Count</th>
<th>Percentage</th>
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</thead>
<tbody>
<tr>
<td>Very Good</td>
<td>9</td>
<td>100%</td>
</tr>
<tr>
<td>Somewhat Good</td>
<td>0</td>
<td>0%</td>
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</tbody>
</table>
I haven't used any V.E. Petrucci Library resources 0 0%
Print Books 7 77.8%
Print Journals (i.e., American Journal of Enology and Viticulture) 4 44.4%
Print Magazines (i.e., Wine Spectator, Practical Winery and Wineyard) 6 66.7%
Electronic Journals 8 88.9%
Computers/WiFi 8 88.9%
Study Space 9 100%
Reference/research with librarian 9 100%

Have any of your courses included a library and information services session with librarian Britt Foster?

Yes 9 100%
No 0 0%

How effective was the session in providing you with skills and tools to complete your assignments for the course?
Please comment either positively or negatively on the V.E. Petrucci Library and its usefulness in your education.

It is a great collection of wine and vine related material. Britt does a great job helping students to learn how to find the info they need.

The library is one of the best aspects of the department!

Britt is one of the few people left here who genuinely cares about help students. The library is a huge resource and is apart of what makes this department.

I think Britt does an absolutely fantastic job. I can't think of anything else I would do differently. I would make it more of a requirement to see Britt for projects/papers. I think we still forget everything the library and internet has to offer us. I notice a lot of students lacking in this area.

The library was very helpful in helping me complete assignments.

Britt has been an outstanding resource both for school research and just as a friendly face. I felt comfortable discussing almost anything with her. The space has been a great place in general for meeting other students, study groups, or just killing 10-15 minutes before class starts.

OVERALL VITICULTURE AND ENOLOGY PROGRAM

How would you rate your interactions with the department office staff?

1 - Very positive 7 77.8%
Please comment either positively or negatively on the department office staff.

They are all very helpful and supportive to the students.

Great staff! They are always there to help in anyway they can.

Depends on who you define as office staff. Poor Andrea has been doing a great job considering the adversity she has faced. The overall moral has been shitty, Cynthia has been a huge source for guidance and positive reinforcement.

I think that we have a great office staff and they are more than willing to help us students out whenever possible. I love Andrea, and think she does an amazing job. However, I think it was a huge setback in the department losing Jayne and it could have been avoided. Our dept. took a big setback this year and adding the loss of Jayne didn't help the dept. keep moving forward positively.

The department office staff was always helpful.

Jayne was always on top of my needs and always helpful. Even when I blew it and was asking for a miracle. Which means that there were some big shoes to fill, but Andrea has been doing a good job as well.

How would you rate your interactions with the department faculty and instructors.

1 - Very positive 2  22.2%
2 - Somewhat positive 4  44.4%
3 - Neutral 2  22.2%
4 - Somewhat negative 1  11.1%
5 - Very negative 0  0%

Please comment either positively or negatively on the department faculty and instructors.

Most of the faculty are very knowledgeable, but some of them could have been a little more focused on teaching. It seems some of them were interested only in research and their classes
were a distraction from that.

The instructors who have left have their own reasons for leaving and some yes were unprofessional and not the best teachers. I am more scared of the two enology lectures left because of their half ass methodology of teaching. Especially Matt Brain, who is simply unqualified to be teaching Enology, He is constantly mistaken on practices and we should have someone with more drive and proper sanitation practices to be teaching the future of the industry.

I would rather talk about this in person.

The instructors, especially Dr. Van Zyl guided and helped me when needed.

On the whole the instruction and interaction with the professors has been good. With a few exceptions. I would rather discuss these in person.

How would you rate the laboratory facilities in the Department?

<table>
<thead>
<tr>
<th>Rating</th>
<th>Percent</th>
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<tbody>
<tr>
<td>1 - Very good</td>
<td>22.2%</td>
</tr>
<tr>
<td>2 - Somewhat good</td>
<td>33.3%</td>
</tr>
<tr>
<td>3 - Neutral</td>
<td>22.2%</td>
</tr>
<tr>
<td>4 - Somewhat bad</td>
<td>11.1%</td>
</tr>
<tr>
<td>5 - Very bad</td>
<td>11.1%</td>
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</table>

Please comment either positively or negatively regarding the laboratory facilities.

We had sufficient equipment, but the facility could use a good cleaning out. It could be better organized.

The Winery Lab is a complete disaster and is unsafe. If there was a walk through, legal there would be some issues if the fire marshal came through.

We have the ability to utilize the companies we have connections with in this industry. However, we have instruments that are so old and in such bad shape. If we want students to move forward with the technology offered in this industry, we should have the opportunity to actually use them and have them work and not break down in the middle of a lab! Big companies such as Gallo, TWG, etc that we can get their used lab equipment which is much newer and cleaner than ours.

The facilities were good.

We had what we needed at a minimum. It seemed like budget constraints kept it at just that though -- the minimum.

How would you rate the vineyard facilities in the Department?
Please comment either positively or negatively regarding the laboratory facilities.

It was very convenient for me to collect leaf samples from the variety block for my vit 165 class. But the block could be better cared for.

Jon tried so much to convert the winery into more modern, sanitary practices. That has all gone down the drain and will continue to go down the drain until someone hold him accountable. Talk to Dr. Thornton, and Fugelsang.

Just look at the greenhouse and that says it all.

When taking a Vit lab, the vineyard facilities was my go to place to learn more.

I regret that I did not take more viticulture classes. So I had little experience din the vineyards. What I had was satisfactory though.

How would you rate the winery facilities in the Department?

1 - Very good 2 22.2%
2 - Somewhat good 4 44.4%
3 - Neutral 2 22.2%
4 - Somewhat bad 0 0%
5 - Very bad 1 11.1%
Please comment either positively or negatively on the winery and its usefulness in your education.

There are some issues that need to be addressed regarding the cleanliness of the winery. The birds need to be kept out of the facility. Other than the bird problem it is pretty much like any other commercial winery. It is great to have a variety of equipment to work with.
Sanitation is terrible and will continue to degrade and ruin the winery.
I was more in the vineyard side than Enology side.
I only had the chance to go to the winery a couple times, very clean and organized facility.
We have what is needed to get the job done. It would be nice to see some new equipment though. I hear anecdotal reports of our competitors receiving new states of the art stuff all the time. I recognize this is likely at the whim of the CSU system as a whole, not though lack of effort or care of the dept.

How do you think the overall program could be strengthened?

If you checked CHANGE EXISTING COURSES, please describe how.

More opportunity for hands on learning. More practical application of enology principles.
Structure the courses more together, and try to divide the classes into more specific subjects to reduce review time and expand more on the material. Follow the proper prerequisite guidelines.
Hire industry professionals who have the proper background to teach.
Lets talk about this in person, I have expressed my whole time at Fresno State my issues and ways to improve the department.
More knowledgeable guidance. The path to graduation is Byzantine with all the prerequisites, order of classes confusing. I know many students who have been set back entire years because they received inadequate guidance. There should be a "roadmap" that is laid out BEFORE a student registers for classes their very first semester. As it stands right now you have to try to piece it together from multiple often contradictory sources. And it seems requirements keep changing. Plus advisors are either unknowledgeable or reluctant. And I have been assigned 3 different advisors during my 2-1/2 years here.

**TELL US ABOUT YOURSELF**

**Do you have a job in the grape and/or wine industry?**

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<thead>
<tr>
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<th>Yes</th>
<th>No</th>
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<tr>
<td>Count</td>
<td>7</td>
<td>2</td>
</tr>
<tr>
<td>%</td>
<td>77.8%</td>
<td>22.2%</td>
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**If you answered yes to the above question, is it full time or part time?**

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<thead>
<tr>
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<th>Full-time</th>
<th>Part-time</th>
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<tr>
<td>Count</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>%</td>
<td>71.4%</td>
<td>28.6%</td>
</tr>
</tbody>
</table>

**What is your job title?**

- Research Chemist
- Harvest winemaking intern
- Harvest Inter
- Vineyard Technician
- apprentice to vineyard manager
- Production Enologist
- Cellar intern

**Are there members of your family in the grape and/or wine business?**

<table>
<thead>
<tr>
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<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Count</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>%</td>
<td>33.3%</td>
<td>66.7%</td>
</tr>
</tbody>
</table>
If yes, which members?

- Parent(s): 2 (66.7%)
- Grandparent(s): 0 (0%)
- Sibling: 0 (0%)
- Uncle/Aunt: 1 (33.3%)
- Other: 0 (0%)

If yes, what type of grape and/or wine business are they in?

- Raisin grape grower: 0 (0%)
- Table grape grower: 0 (0%)
- Wine grape grower: 0 (0%)
- Winery owner: 0 (0%)
- Winery worker: 0 (0%)
- Vineyard worker: 1 (25%)
- Other: 3 (75%)

What is your age?

- 28
- 23
- 48
- 25
- 24
- 29
- 39

How would you describe yourself?
What was your GPA (Grade Point Average) at graduation?

- 4.0 or higher: 0 (0%)
- 3.5 - 3.99: 5 (55.6%)
- 3.0 - 3.49: 3 (33.3%)
- 2.5 - 2.99: 1 (11.1%)
- 2.0 - 2.49: 0 (0%)

Number of daily responses:

- 4
- 3
- 2
- 1
- 0