VITICULTURE AND WINERY TECHNOLOGY

Summary of Program Review:

A.   Major Findings

   1.   Strengths:

> The VWT program is strong. Our program is ideally aligned with the work force needs of the Napa Valley, as seen in our excellent job placement rates which surpass the designated "stretch goal" by nearly 10 percentage points. The Napa Valley is an internationally famous wine-growing region and NVC's VWT program is the most accessible accredited career training program for that workforce.
>
> Program wide student enrollments over the 3 years included in this review were stable, and average course enrollments increased from 2021-2024.   Additionally, in the current 2024-2025 academic year we are seeing greater enrollments than in the last 4 academic years. This reflects efforts across the program to engage with the community, improve outreach and improve access. I would in particular like to give credit to Professor Paul Wagner and our new Manager of Hospitality, Winery, and Culinary Operations, Enoch Shully, whose weekly community wine-tasting seminars have been hugely successful.
>
> Other programmatic strengths include:
>
> o   Excellent student retention rates. Across the program, nearly 95% of students stick with their courses. This speaks to the high level of engagement students have with their courses, instructors, and the program overall.
>
> o   The opening of the new Wine Spectator Wine Education Center for fall 2025 will continue to attract new students to our program in the coming year. This new building will create:
>
> * A lab without enough workstations to give all students ample hands-on experience
> * Classrooms designed to improve sensory analysis, which is critical for more than 50% of our course offerings
> * Instruction in the use of new technology including the LAMP assay to test for the presence of the Red Blotch Virus in grapevines
> * Flexible classroom spaces that can accommodate large groups and provide space for industry meetings
> * Improved classroom technology that will allow for flexible distance learning modalities in the future
> * A more welcoming and well-lit area that is important for improving safety and building community among our students, particularly for our many evening sections.
> * Seismically stable classrooms!
>
> o   The creation of a new Wine Hospitality course and Certificate of Achievement that directly address a need in the local workforce.
>
> o   Strong relations between our program and the local wine industry as evinced by:
>
> * Membership in the Napa Vintners Association, the Napa Grapegrowers, and the Napa Farm Bureau
> * Guest speakers and lectures providing time and materials across our courses
> * Excellent community support for field trips opportunities
>
> o   The addition of a Student Winery Wine Club: Alumni, community members, and other consumers now have a rewarding way to support our program. Everyone wins.

2. Areas for Improvement:

Hybrid course success rates:
- Success rates in many of our hybrid courses are lagging those of in-person instruction. Instructors teaching in hybrid modalities should ensure that communication with students is clear and assessments are frequently used to encourage participation in the online modality.
- Possible updates to VWT-271

Improved discipline-specific counseling as to appropriate programmatic pathways, timeframes and workloads:
- Alternate week online/in-person hybrid modalities allow for a heavy course load. For example, a student working full time could enroll in four 3-unit classes with no more than 2 weekly meetings. On the one hand, this is very convenient, but on the other, 12 units is a heavy load for students working full-time hours. To put it in so many words, we don't want students biting off more than they can chew.

Coordination and payment of service providers is difficult and impacts the vineyard lab functionality.
- The NVC vineyard in particular relies on local service providers to run effectively. Replanting targets have been missed, fertilization targets have been missed, trellis installation targets have been missed, and weeding and irrigation targets have all been missed because our service providers are not getting paid in a timely manner. For example, the crew I had hired for bud grafting would not come out for a second round of grafting until they were paid for the first round which happened the previous year. Our inability to pay for services rendered hurts our reputation and makes it more difficult to find the services we require.

Finding ways to incorporate winery equipment into instruction:
- In the past 7 years the college winery has procured a new bottling line and crossflow filtration system, both of which were listed as strengths in the previous program review, but these have not been well utilized to date.

Program Coordinator Compensation:
- In 2020 the stipend for the VWT program coordinator was cut in half. Since assuming this role over the summer, I have spent significantly more time coordinating the program than on any one of my courses, or the coordination of the vineyard, all of which contribute more to my salary. It's a bit unfair.

3. Projected Program Growth, Stability, or Viability:

Growth!

B. Program's Support of Institutional Mission and Goals

1. Description of Alignment between Program and Institutional Mission:

   The stated goal of NVC's mission is to transform lives, whether that be through transfer, career training or the exploration of their interests. The VWT program is well aligned with all of these goals. We train the single largest workforce in the Napa Valley with an 85% job placement rate. Students in our program go on to receive bachelor's degrees, often in the wine business program at Sonoma State. Lastly, we are a space for many people throughout the greater Bay area to explore their interest in winemaking, winegrowing, wine tasting, whatever it may be.
   Beyond that we provide student-focused, equitable education that is closely tied to the local community. Wine is a fundamental piece of our community identity.
   In short, the VWT program is ideally aligned with the campus mission.

2. Assessment of Program's Recent Contributions to Institutional Mission:

   Community, community, community. We serve the largest employers in our community with every student that graduates with an A.S. degree, transfers to a 4-year program, or simply picks up a new skill or two.   Many of our currents students are already employed in the wine industry and come to us to advance their careers. We serve a high number of first generation and Hispanic students at an HSI with strong successful completion rates.
   Beyond that, our programs makes 4 commercial wines that carry our intstitution's name. Every bottle tasted at a college or community event or sold to consumers is a reminder of the strength of NVC's instructional program.

3. Recent Program Activities Promoting the Goals of the Institutional Strategic Plan and Other Institutional Plans/Initiatives:

> The six goals of the 2018-2023 Institutional Strategic Plan are provided here for reference:
> o Work with local educational partners to promote opportunities at NVC and equip incoming students with the skills and resources needed for college success
> o Engage NVC students and assist in their progress towards educational and job training goals
> o Increase NVC student achievement and completion of educational and job training goals
> o Achieve equity in student outcomes and promote equity-mindedness as a means to evaluate all District practices
> o Ensure the fiscal stability of NVC as a community-supported district
> o Enhance collaboration between NVC and community and civic partners
> -------------------------------
>
> For all of these reasons VWT continues to support the Institutional Strategic Plan. Recent acitivities include:
> - Participation at the Unified Wine and Grape Symposium in Sacramento and the Napa High Career Fair to engage with potential students and the community at large.
> - Work with local industry organizations to connect students to local industry leaders, for example:
>   - o NVC students have attended the Napa Grapegrowers signature event, Rootstock for the past 2 years.
>   - o The Napa Grapegrowers and the Napa Farm Bureau routinely provide students with free access to all educational events.
> - Hosting weekly tastings with industry leaders that are open to students and community members.
> - Connecting students with internships including at Constellation, Treasury, Vine Balance Consulting, Bentinelli Vineyards, Tom Eddy Vineyards, and a new partnership with the Wine Group.
> - Connecting students with Paso Adelante a Napa Grapegrowers group dedicated to helping young professionals network and advance their careers. This is equity minded because it creates connections and "ins" without relying on familial relationships.
> - Classes are scheduled with the goal of increasing student access for working students.

C. New Objectives/Goals:

> - Leverage the New Wine Education to improve learning outcomes and attract new students.
> - Continue with our student/community tasting program
> - Host a seminar series open to the community and students alike. The first series of topics will focus on Women in the industry.
> - Create Certificates of Achievement from applicable Local certificates
> - Finalize the new Wine Hospitality COA
> - Find space in the program for our new Wine Hospitality class
> - Create an additional Wine Marketing and Sales course, focusing on tasting room management, wine club management and other Direct-to-Consumer wine sales practices.
> - Finish the vineyard replant and pay service providers in a timely manner.
> - Incorporate industry SOP's for winery bottling lines and cross flow filtrations systems into winemaking courses.
> - Launch a Summer 2026 Study Abroad Class in European Viticulture.

D. Description of Process Used to Ensure "Inclusive Program Review"

> All VWT faculty, instructional assistants, and the Manager of Winery, Culinary, and Hospitality Operationals are consulted and their input on this review is solicited before finalization.

This report covers the following program, degrees, certificates, and courses (based on the Taxonomy of Programs on file with the Office of Academic Affairs):

Program	Viticulture & Winery Technology	
Degrees/ Certificates	Winemaking: AS Wine Laboratory Technician: Local Cert Winery Management: Local Cert Winery Operations: Local Cert Wine Production: COA Viticulture: AS Viticulture and Enology: CoA Vineyard Management: Local Cert Vineyard Pest Scouting: Local Cert Vineyard Pruning: Local Cert Viticulture Operations: Local Cert Wine Marketing and Sales: AS Wine Marketing and Sales: CoA	
Courses	VWT 130	VWT 229
	VWT 132	VWT 230
	VWT 134	VWT 231
	VWT 136	VWT 232
	VWT 137	VWT 233
	VWT 140	VWT 234
	VWT 145	VWT 241
	VWT 147	VWT 270
	VWT 150	VWT 271
	VWT 151	VWT 272
	VWT 152	VWT 275
	VWT 153	VWT 280
	VWT 154	VWT 281
	VWT 172	VWT 282
	VWT 173	VWT 283
	VWT 180	VWT 288
	VWT 190	VWT 290
	VWT 191	VWT 291

Taxonomy of Programs, February 2025

I.   PROGRAM DATA

A.   Demand

1.   Headcount and Enrollment

	2021-2022	2022-2023	2023-2024	Change over 3-Year Period
Headcount				
Within the Program	**237**	**217**	**215**	**-9.3%**
Across the Institution	**6,653**	**6,161**	**6,473**	**-2.7%**
VWT-130 Gen Vit	75	88	77	2.7%
VWT-132 Soils	33	35	24	-27.3%
VWT-134 Pruning	12	13	15	25.0%
VWT-136	32	--	22	-31.3%
VWT-137	21	22	16	-23.8%
VWT-140	17	--	14	-17.6%
VWT-147	11	--	20	81.8%
VWT-150	21	13	--	-100%
VWT-151	13	16	--	-100%
VWT-152	16	--	19	18.8%
VWT-153	8	13	--	-100%
VWT-154	16	--	15	-6.3%
VWT-172	32	41	37	15.6%
VWT-173	45	44	47	4.4%
VWT-180 Fund Enol	53	53	80	50.9%
VWT-190 WoEx	8	5	2	-75.0%
VWT-191 WoEx	1	3	2	100%
VWT-229 Sum Vin Ops	10	9	7	-30.0%
VWT-230 Fall Vin Ops	20	16	19	-5.0%
VWT-231 Sp Vin Ops	15	14	13	-13.3%
VWT-232 Vnyd Mgmt	12	19	12	0%
VWT-233 Advanced Vit	8	16	19	138%
VWT-234 IPM	--	13	13	N/A
VWT-241	17	15	--	-100%
VWT-270	23	5	11	-52.2%
VWT-271	21	18	11	-47.6%
VWT-272	10	16	--	-100%
VWT-280	--	13	9	N/A
VWT-281	18	17	21	16.7%
VWT-283	--	--	11	N/A
VWT-290 WoEx	2	--	4	100%
VWT-291 Wox	2	4	5	150%
Within the Program	**572**	**521**	**545**	**-4.7%**
Across the Institution	**25,216**	**23,488**	**24,913**	**-1.2%**
Source: SQL Queries for Fall 2024 Program Review				
RPIE Analysis: The number of students enrolled (headcount) in the Viticulture and Winery Technology Program decreased by 9.3% over the past three years, while headcount across the institution decreased by 2.7%. Enrollment within the Viticulture				

and Winery Technology Program decreased by 4.7%, while enrollment across the institution decreased by 1.2% over the same period.

Enrollment in the following courses changed by more than 10% (±10%) between 2021-2022 and 2023-2024:

    Courses with enrollment increases:
- *VWT-291 (150%)*
- *VWT-233 (138%)*
- *VWT-191 (100%)*
- *VWT-147 (81.8%)*
- *VWT-180 (50.9%)*
- *VWT-134 (25.0%)*
- *VWT-152 (18.8%)*
- *VWT-281 (16.7%)*
- *VWT-172 (15.6%)*

    Courses with enrollment decreases:
- *VWT-150 (-100%)*
- *VWT-151 (-100%)*
- *VWT-153 (-100%)*
- *VWT-241 (-100%)*
- *VWT-272 (-100%)*
- *VWT-190 (-75.0%)*
- *VWT-270 (-52.2%)*
- *VWT-271 (-47.6%)*
- *VWT-136 (-31.3%)*
- *VWT-229 (-30.0%)*
- *VWT-132 (-27.3%)*
- *VWT-137 (-23.8%)*
- *VWT-140 (-17.6%)*
- *VWT-231 (-13.3%)*

The remaining courses reported in the Taxonomy of Programs for Viticulture and Winery Technology (VWT-145, -275, -282, and -288) did not have any enrollments between 2021-2022 and 2023-2024.

Program Reflection:

I find it difficult to draw conclusions using the headcount and enrollment numbers presented here. The unprecedented nature of the global COVID-19 pandemic and its impact on education mean that this 3 year data set is hard to use in planning for the future.

The enrollment data, as presented, does not lend itself to a good analysis of the program in retrospect for a number of reasons.

- College wide cuts in response to the pandemic reduced course offerings year to year. Thus, comparing the sum totals of students in all VWT classes over the 3-year period does not produce comparable data. In the end, the average enrollment per class in 2023-2024 was actually greater than in 2021-2022.
    - In 2021-2022 there were 27 VWT courses offered,
    - In 2022-2023 there were 24 VWT courses offered
    - In 2023-2024 there were 25 VWT courses offered
- Three of the listed courses did not run in 2021-2022. Of those 3, VWT 234 and VWT 280 did not run due to low enrollments. The 5 courses that did not run in 2022-2024 did not run because of institutional cuts.
    - I believe that VWT 280 actually did run, but the course cap was so small due to pandemic restrictions that perhaps it didn't register?

Despite what the above data indicates at first glance, enrollments were fairly steady over the 3-year period.

The lower headcount numbers are a concern, however. Headcount reflects fewer total students involved in the program as a whole. Digging into the #'s, there were 22 fewer students taking VWT classes in 23-24 than in 21-22. While this is a small number it could be significant for a small program. I believe that the drop in headcount can largely be tied to the decrease in course offerings. Four of the 5 classes not offered in the 23-24 are required for the AS degree in Wine Marketing and Sales, indicating that this program was disproportionately impacted by cuts to course offerings. Additionally, 3 of those 4 classes are wine appreciation classes that frequently attract community members and students looking for an interesting elective. Although, I would assume many of those potential students did enroll in the wine appreciation courses that were offered, it is likely that the drop in headcount is partially due to students not finding the courses they needed or wanted.

Even with these explanations, we could be seeing a trend toward fewer VWT students. I hope that this was a one-off related to the pandemic and reduced course offerings and does reflect further declining enrollments. This data is not out of line with NVC or higher education in general. I find a bright spot in the increased enrollments we saw this semester in the VWT program. I do not have headcount data but enrollments have increased (>620 in 24-25).

In evaluating the course level changes in enrollment, it is again not an apples-to-apples comparison. I would suggest that the Work Experience courses, VWT 190 (-75%) 191 (+100%) and VWT 291 (+150%) be removed from consideration. Additionally, courses that were not offered in 2023-2024 and thus show a 100% decline in enrollment should not be considered either. I find it interesting that while these classes show decreased enrollments the 3 classes that did not run in 2021-2022 but did run in 2022-2023 do not count as enrollment increases.

2. **Average Class Size**

	2021-2022		2022-2023		2023-2024		Three-Year	
	Sections	Average Size	Sections	Average Size	Sections	Average Size	Average Section Size	Trend
VWT-130	3	25.0	3	29.3	3	25.7	26.7	2.8%
VWT-132	1	33.0	1	35.0	1	24.0	30.7	-27.3%
VWT-134	1	12.0	1	13.0	1	15.0	13.3	25.0%
VWT-136	2	16.0	--	--	1	22.0	18.0	37.5%
VWT-137	1	21.0	1	22.0	1	16.0	19.7	-23.8%
VWT-140	1	17.0	--	--	1	14.0	15.5	-17.6%
VWT-147	1	11.0	--	--	1	20.0	15.5	81.8%
VWT-150	1	21.0	1	13.0	--	--	17.0	-100%
VWT-151	1	13.0	1	16.0	--	--	14.5	-100%
VWT-152	1	16.0	--	--	1	19.0	17.5	18.8%
VWT-153	1	8.0	1	13.0	--	--	10.5	-100%
VWT-154	1	16.0	--	--	1	15.0	15.5	-6.3%
VWT-172	3	10.7	3	13.7	3	12.3	12.2	15.0%
VWT-173	2	22.5	3	14.7	3	15.7	17.0	-30.2%
VWT-180	2	26.5	3	17.7	5	16.0	18.6	-39.6%
VWT-190	2	5.0	2	2.5	2	3.0	3.5	-40.0%
VWT-191	1	3.0	3	2.3	2	3.5	2.8	16.7%
VWT-229	1	10.0	1	9.0	1	7.0	8.7	-30.0%
VWT-230	1	20.0	1	16.0	1	19.0	18.3	-5.0%
VWT-231	1	15.0	1	14.0	1	13.0	14.0	-13.3%
VWT-232	1	12.0	1	19.0	1	12.0	14.3	0%
VWT-233	1	8.0	1	16.0	1	19.0	14.3	138%
VWT-234	--	--	1	13.0	1	13.0	13.0	N/A
VWT-241	1	17.0	1	15.0	--	--	16.0	-100%
VWT-270	2	11.5	1	5.0	1	11.0	9.8	-4.3%
VWT-271	1	21.0	1	18.0	1	11.0	16.7	-47.6%
VWT-272	1	10.0	1	16.0	--	--	13.0	-100%
VWT-280	--	--	1	13.0	1	9.0	11.0	N/A
VWT-281	1	18.0	1	17.0	1	21.0	18.7	16.7%
VWT-283	--	--	--	--	1	11.0	11.0	N/A
Program Average*	**36**	**15.9**	**35**	**14.9**	**37**	**14.7**	**15.2**	**-7.5%**
Institutional Average*	**1,048**	**24.1**	**954**	**24.6**	**986**	**25.3**	**24.6**	**5.0%**

Sources: SQL Queries for Fall 2024 Program Review for enrollment data, Enrollment Management Division Reports and Concurrent Courses Reports for course-section data.

Average Section Size across the three-year period for courses, and both within academic years and across the three-year period for the program and institutional levels is calculated as:

Total # Enrollments.

Total # Sections
It is not the average of the three annual averages.
Note Regarding Concurrent Sections:
o Concurrent sections of VWT-190 and VWT-290; VWT-101 and VWT-291 reported as one section, under the course identified as the primary section.

RPIE Analysis: Over the past three years, the Viticulture and Winery Technology Program has claimed an average of 15.2 students per section. The average class size in the program is lower than the average class size of 24.6 students per section across the institution during this period. Average class size in the program decreased by 7.5% between 2021-2022 and 2023-2024. Average class size at the institutional level increased by 5.0% over the same period.

Average class size in the following courses changed by more than 10% (±10%) between 2021-2022 and 2023-2024:

Courses with increases in average class size:
- o VWT-233 (138%)
- o VWT-147 (81.8%)
- o VWT-136 (37.5%)
- o VWT-134 (25.0%)
- o VWT-152 (18.8%)
- o VWT-191 (16.7%)VWt
- o VWT-281(16.7%)
- o VWT-172 (15.0%)

Courses with decreases in average class size:
- o VWT-150 (-100%)
- o VWT-151 (-100%)
- o VWT-153 (-100%)
- o VWT-241 (-100%)
- o VWT-272 (-100%)
- o VWT-271 (-47.6%)
- o VWT-190 (-40.0%)
- o VWT-180 (-39.6%)
- o VWT-173 (-30.2%)
- o VWT-229 (-30.0%)
- o VWT-132 (-27.3%)
- o VWT-137 (-23.8%)
- o VWT-140 (-17.6%)
- o VWT-231 (-13.3%)

Program Reflection:

In reflecting upon this data, at first I was alarmed to see that the average class size in VWT decreased, while campus-wide class sizes increased. However, when one digs into the data, we find the same issues here as in the enrollment numbers.

- VWT150, 151, 153, and 241 all show 100% declines in enrollment. They did not run in 23-24 because of limits on total program units offered, not because of low enrollments. Data on 22-23 enrollments is included in the table but not used in any of the calculations. The trend for these courses should read N/A, and their data should not be used in the calculation of program averages. Courses that were cancelled due to low enrollments in 21-22, but did run in 23-24 are not portrayed as 100% increases in class sizes, but rather as N/A.
- **When the same calculation of trend in class size is made without the data from the 3 classes that didn't run in 23-24 and without the Work Experience classes (190 & 191), average class size in the program increased by 4.8%, which is in line with the institutional average.**

When we focus on classes that saw large fluctuations in enrollment (>10%), we see how noisy the data is. Twenty-five of the 30 VWT classes saw class size changes over 10%. I won't be discussing Work Experience classes-190 & 191.

- VWT 233, was a new class in 21-22 and enrollment was low. The increase reflects the course finding its target.
- VWT 136, 147 and 152 did not run in 22-23 and thus saw an increase due to pent up demand. VWT 154 which also didn't run in 22-23, didn't have much of change, indicating that that course is well-suited to run every other year.
- This leaves VWT 134, 281, and 172 with larger increases in class size. These are all either fully in-person or with a critical in-person component. These increases may reflect larger class caps and reduced student anxiety over in-person instruction.

On the other side of the coin there are the classes that trended smaller.

- As previously discussed, VWT 150, 151, 153, and 241 did not run in 23-24.
- VWT 180 and VWT 173 ran additional sections in 2023-2024 as part of a pilot of distance education-based wine production certification. These courses did not see declines in enrollment, but rather average class sizes. While it may seem to conflict with institution-wide contractions in course offerings, this pilot had been planned for years before the institution wide cuts. Thus, it was allowed to go forward. Unfortunately, the wine production distance-ed path did not attract sufficient interest to be continued in 24-25.
- VWT 272 did not run in 2023-2024 but this course was cancelled due to low enrollment so this is worth looking at. Whie this course is critical for Program level learning in the Wine Production, its subject matter, wine Chemistry and Microbiology is not attractive to students. We frequently find students putting off science-focused coursework, whether it be this course or the Chemistry and Biology classes that students in our Winery Tech and Viticulture programs need to take. One long term goal would be to reframe the conversation around math and sciences so that students are not so worried about taking these courses. This is part of a greater issue in STEM education in the K-12 system.
- The drop in enrollment in VWT 271, 231, 140, 137 and 132 is more of a concern. However, VWT 271, 231, 140, and 137 are currently (spring 25) at or above their class size in 21-22 so we don't have to think too hard about it. VWT 132 is currently 12% smaller than it was in 21-22. This still makes it consistently one of the largest average class sizes in the department. It is not a concern.
- The outlier is VWT 229, Summer Vineyard Operations. This course runs with low enrollments because the vineyard relies on the labor provided by the students. It is still a useful course. I believe that with some extra promotion and the increase in visibility of the student vineyard as our replant project comes to fruition, we will start to see increased enrollments.

It does seem clear that many of our classes did not attract enough students over this 3-year period. Classes such as VWT 232, 270 and 271 are geared toward students nearing the end of their studies. Low enrollments over this period could reflect the decline in students entering the program during the pandemic. Fewer new students in the 20-21 and 21-22 academic years mean fewer students completing degrees in the following years.

The better news is that enrollments in the Introductory classes VWT-130 (General Vit), 180 (Fundamentals of Enology) and 136 (Wines of the World) held relatively steady over this period. The fact that we are seeing higher enrollments in these advanced classes (232 and 270) in the current spring 25 semester reflects this. Another question to ask is "are these enrollments what we are looking for, and if not should scheduling be adjusted?" Some of the average class sizes are too low and indicate that too many sections were run in certain years, as in VWT 172 and 180. The number of sections running this year (2024-2025) is reduced. Another point for discussion is that ideal class size varies tremendously from one course to the next. What would be considered a modest class size for VWT-130, General Vit is too large for lab type classes which require smaller class sizes. Additionally, the diversity in the fields of study in our program requires a larger breadth of course offerings. There is no other program on campus that combines such disparate academic tracts. Reducing the number of class offerings in Wine Marketing and Sales will not increase the class sizes in Viticulture and vice versa. These tracts are all critical for the wine industry but do not overlap significantly. Lastly, we are asked to evaluate possible schedule changes. Given the current increases in class sizes in spring 2025, I believe we should continue with the current schedule of class offerings or potentially increase class offerings. VWT-241, Wine Marketing and Sales, should run annually as opposed to in alternate years. This is the capstone class for our Wine Marketing and Sales AS degree and Certificate of Achievement and annual offerings will create steadier numbers of completers in those Programs.

I do believe that we need the flexibility to offer classes that have not run in a few years but are still listed in the Catalog and required for some certificates, VWT-275, Winery Compliance, in particular.

3. **Fill Rate and Productivity**

Fill Rate			
	Enrollments	Capacity	Fill Rate
2021-2022	572	1,381	41.4%
2022-2023	521	1,420	36.7%
2023-2024	545	1,505	36.2%
Three-Year Program Total	**1,638**	**4,306**	**38.0%**
Productivity			
	FTES	FTEF	Productivity
2021-2022	51.3	6.1	8.4
2022-2023	48.0	5.8	8.3
2023-2024	47.4	6.0	7.9
Three-Year Program Total	**146.7**	**17.9**	**8.2**

Sources: SQL Queries for Fall 2024 Program Review; SQL Server Reporting Services – Term to Term Enrollment FTES Load Comparison Report (by Credit Course)

RPIE Analysis: Between 2021-2022 and 2023-2024, the fill rate within the Viticulture and Winery Technology Program ranged from 36.2% to 41.4%. [The fill rate has not been calculated at the institutional level.] The program-level rate across the three-year period was 38.0%. Between 2021-2022 and 2022-2023, enrollment decreased and capacity increased, resulting in a decrease in fill rate. Between 2022-2023 and 2023-2024, both enrollment and capacity increased, resulting in a slight decrease in fill rate (due to a higher rate of increase in capacity).

Productivity within the Viticulture and Winery Technology Program ranged from 7.9 to 8.4. [Productivity has not been calculated at the institutional level.] The three-year productivity of 8.2 is lower than the target level of 17.5, which reflects 1 FTEF (full-time equivalent faculty) accounting for 17.5 FTES (full-time equivalent students) across the academic year. (This target reflects 525 weekly student contact hours for one full-time student across the academic year.)

Program Reflection:

The fill rate and productivity figures are difficult to draw conclusions from. In some cases, the class cap is not aligned with the appropriate number of students. I refer in particular to the vineyard operations classes which had caps of 40-50 students. I repeatedly asked for lower caps to suit safety needs, but was put off because enrollment was low enough without the caps. There are no other lab classes on campus with such high limits. A class cap of 50 for a class that should be limited to 25 skews fill rates.

The question of Productivity is harder to read. The decline in productivity is concerning. The 8.2 average is well below what it should be. Productivity from 2018 to 2021 averaged 11.9. The lower productivity numbers are due in large part to the low class-caps for indoor lab classes due to COVID 19 restrictions but these trends should have evaporated by 23-24, which was not the case. However, I believe this was mostly due to the added units for the distance ed classes. While I am not willing to write off a distance-ed production program, it should be on hold until there is sufficient demand, and a PR campaign targeted to reach students outside of the Bay Area/Sacramento region.

4. **Labor Market Demand**

Economic Development Department Standard Occupational Classification Description Codes: 11-9013, 19-1012, 19-1013	Numeric Change in Employment (Baseline Year to Projected Year)	Projected Growth (% Change in Positions; 2020 Base Employment vs. 2030 Projected Employment)	Projected Number of Positions (Total Job Openings)
Napa County (2020-2030)	230	12.8%	2,070
Bay Area[A] (2020-2030)	-600	-6.3%	8,290
California (2020-2030)	-4,500	-4.3%	100,570
Source: Economic Development Department Labor Market Information, Occupational Data, Occupational Projections (http://www.labormarketinfo.edd.ca.gov) *[A]Bay Area counties include: Alameda, Contra Costa, Marin, San Francisco, San Mateo, Santa Clara, Solano, and Sonoma. Figures also include San Benito County (reported with projections for Santa Clara County).*			

RPIE Analysis: The figures reported in the table above pertain to the Standard Occupational Classification for the following positions:
- o *Farmers, Ranchers, and Other Agricultural Managers (11-9013)*
- o *Food Scientists and Technologists (19-1012)*
- o *Soil and Plant Scientists (19-1013)*

The Economic Development Department projects that the number of positions within Napa County will increase by 12.8% (230 positions) between 2020 and 2030. The number of positions in the Bay Area (not including Napa County) is expected to decrease by 6.3% (-600 positions) between 2020 and 2030. The number of positions across the state is expected to decrease by 4.3% (-4,500 positions) between 2020 and 2030.

Program Reflection:

Labor market data support the need for our VWT Winery Technology and Viticulture programs. What is missing is labor market data on wine marketing, sales and hospitality. I believe if we had this data, it would reflect a strong need for **skilled** workers in these areas, which we hear from our Advisory Committee. The wine industry and hospitality industry are the top employers in the county. Strong career education programs to support this workforce is essential in Napa County.

B. Momentum

   1. Retention and Successful Course Completion Rates

Course	Retention Rates (Across Three Years)			Successful Course Completion Rates (Across Three Years)		
	Rate	Course Rate vs. Program Rate		Rate	Course Rate vs. Program Rate	
		Above	Below		Above	Below
VWT-130	92.1%		X	69.0%		*X*
VWT-132	93.5%		--	82.6%	X	
VWT-134	97.5%	X		90.0%	*X*	
VWT-136	96.3%	X		88.9%	*X*	
VWT-137	96.6%	X		86.4%	*X*	
VWT-140	100%	X		74.2%		X
VWT-147	100%	X		90.0%	*X*	
VWT-150	97.0%	X		87.9%	X	
VWT-151	100%	X		93.1%	*X*	
VWT-152	100%	X		91.4%	*X*	
VWT-153	95.2%	--		95.2%	*X*	
VWT-154	93.3%		X	76.7%	--	
VWT-172	87.3%		*X*	65.5%		*X*
VWT-173	91.9%		X	71.9%		X
VWT-180	95.1%	--		67.6%		*X*
VWT-190	100%	X		53.3%		*X*
VWT-191	*			*		
VWT-229	100%	X		84.6%	X	
VWT-230	98.1%	X		85.2%	X	
VWT-231	97.6%	X		83.3%	X	
VWT-232	100%	X		67.4%		X
VWT-233	97.7%	X		69.8%		X
VWT-234	100%	X		73.1%		X
VWT-241	93.8%		--	84.4%	X	
VWT-270	92.3%		X	74.4%		X
VWT-271	86.0%		*X*	58.0%		*X*
VWT-272	88.5%		X	69.2%		X
VWT-280	100%	X		100%	*X*	
VWT-281	96.4%	X		92.9%	*X*	
VWT-283	100%	X		100%	*X*	
VWT-290	*			*		
VWT-291	100%	X		90.9%	X	
Program Level	94.5%			76.5%		
Institutional Level	**90.9%**			**73.2%**		

Source: SQL Queries for Fall 2024 Program Review
-- Indicates a value that is within 1% of the program-level rate.
Bold italics denote a statistically significant difference between the course-level rate and the program-level rate.

Bold denotes a statistically significant difference between the program-level rate and the institutional rate. The lower of the two rates is highlighted in bold.
*Data were suppressed due to low N (N < 10).
Note: Grades of EW (Excused Withdrawal) for spring 2020 and beyond are not included in the calculations of the three-year retention and successful course completion rates reported above. This approach reflects the standard recommended research practice of not including EWs in either the numerator or the denominator for these rates.

RPIE Analysis: Over the past three years, the retention rate for the Viticulture and Winery Technology Program was significantly higher than the retention rate at the institutional level. The retention rates for VWT-172 and VWT-271 were significantly lower than the program-level rate. The retention rate for the Viticulture and Winery Technology Program falls within the third quartile (Q3) among program-level retention rates (across 60 instructional programs, over the past three years). The retention rate for Viticulture and Winery Technology is among the highest 50% of retention rates among NVC programs.

Over the past three years, the successful course completion rate for the Viticulture and Winery Technology Program was significantly higher than the rate at the institutional level. The successful course completion rates for VWT-130, VWT-172, VWT-180, VWT-190, and VWT-271 were significantly lower than the program-level rate. (Courses with significantly higher successful course completion rates than the program-level rate are noted in the table above.) The successful course completion rate for Viticulture and Winery Technology falls within the second quartile (Q2) among program-level successful course completion rates (across 60 instructional programs, over the past three years). The successful course completion rate for Viticulture and Winery Technology is among the lowest 50% of successful course completion rates among NVC programs.

Over the past three years, the difference between retention and successful course completion at the program level (18.0%) reflected the difference at the institutional level (17.7%). This figure represents the proportion of non-passing grades assigned to students at the end of the semester (i.e., grades of D, F, I, NP).

The following Viticulture and Winery Technology courses claimed a difference (between retention and successful course completion) that exceeded the 18.0% difference at the program level:
- o VWT-190 (46.7%)
- o VWT-232 (32.6%)
- o VWT-271 (28.0%)
- o VWT-233 (27.9%)
- o VWT-180 (27.5%)
- o VWT-234 (26.9%)
- o VWT-140 (25.8%)
- o VWT-130 (23.1%)
- o VWT-172 (21.8%)
- o VWT-173 (20.0%)
- o VWT-272 (19.3%)

Program Reflection:

Our program wide student retention data is excellent. Good work everyone on maintaining student interest and participation. Most of the classes where retention lags institutional average are introductory classes that students often join to explore the subject matter. They may find that it isn't right for them, or that the work load exceeds expectations. The exception to this would be Winery Management, VWT 271 and Lab Analysis 172, although these numbers are not so far off as to create alarm.

Our successful course completion rates are also above institutional averages, but I think we would all like to see these improve.

- The low success rates in VWT 130, 140, and 180 are not concerning because these are introductory classes.
- What stands out as more problematic are the low success rates in VWT 172, 173, 232, 233, and 272. I do not include VWT 234 and 270 here because the rates are within 1 or 2 points of average. I taught two of these classes (VWT 232 and 233) and I found a noticeable drop in student performance following the pandemic. I am not sure what the reason is, but students were more likely to miss assignments or exams, in many cases even while they continued to participate otherwise. I believe part of this drop in success comes from the hybrid modality of these courses. When students have work online and in person, they may treat the online material as optional. More frequent assessments of online material have been needed, but these often lead to poor outcomes.
- Changing course modalities to have more in-person options would likely improve successful completions but negatively impact student access and enrollment. VWT 232 and 233 had higher success rates in the 2018-2021 data. Course content did not change but modality did. Again, there is the dilemma of more required in person time reducing access, particularly for students who work full time during the day.
- Another possible reason for poor success rates may be that students are stretched too thin. The alternate week meeting pattern of many of these classes means that working students can fit more into their schedule in each semester. However, a student working full time would struggle to complete more than 2 classes at a time. Working students should be counseled about the expected workloads. They made need help setting attainable goals.
- Lastly, the 58% success rate of VWT-271, Winery Management is problematic and likely inequitable. Changes may be needed to increase success. A course with less than a 60% pass rate is not aligned with programmatic goals.

2. **Student Equity**

	Retention Rates (Across Three Years)		Successful Course Completion Rates (Across Three Years)	
	Program Level	Institution Level	Program Level	Institution Level
Unknown Gender			90.7%	***69.3%***
19 or Younger			***54.7%***	71.1%
African American/Black			61.5%	68.2%
Latinx/Hispanic			71.0%	69.4%
First-Generation			73.3%	69.4%
Not Disabled			76.6%	***73.0%***
Non-Veteran	94.3%	***90.9%***		

Source: SQL Queries for Fall 2024 Program Review

Bold italics denote a statistically significant difference between rates at the program and institutional levels, with the lower of the two rates in ***bold italics***.

*Data suppressed due to low N (<10 students in cohort).

Notes:

Grades of EW (Excused Withdrawal) for spring 2020 and beyond are not included in the calculations of the three-year retention and successful course completion rates reported above. This approach reflects the standard recommended research practice of not including EWs in either the numerator or the denominator for these rates.

The age groupings are based on the student's age of August 15 of each academic year.

The shaded cells in the table do not have data reported because evidence of disproportionate impact was not found at the institutional level (for those demographic group – metric combinations).

RPIE Analysis: This analysis of student equity focuses on the seven demographic groups with significantly lower retention or successful course completion rates found at the institutional level (vs. the corresponding rates among all other demographic groups, combined) over the past three years. Tests of statistical significance were conducted to compare program-level and institution-level rates among the seven groups listed above.

Within the Viticulture and Winery Technology Program, the retention rate among non-veterans was significantly higher than the rate at the institutional level.

Within the Viticulture and Winery Technology Program, the successful course completion rates among students of unknown gender and students without a disability reported were significantly higher than the corresponding rates at the institutional level, while the successful course completion rate among students ages 19 and younger were significantly lower than the corresponding rate at the institutional level. (The difference between the rates among African American/Black students, Latinx/Hispanic students, and first-generation students at the program and institutional levels were not statistically significant.)

The findings regarding equity based on retention rates reflect the findings that emerged from the comparison of retention at the program vs. institutional level, where the program-level rate was significantly higher than the institution-level rate. The findings regarding equity based on successful course completion rates deviate from the findings that emerged from the comparison of successful course completion rates at the program and institutional levels – particularly with respect to students ages 19 and younger. While the program-level successful course completion rate was significantly higher than the institution-level rate, the rate among students ages 19 and younger was significantly lower than the corresponding rate at the institutional level. (See Section I.B.1 above.)

Program Reflection:

Overall, I think we are doing pretty well on our equity-based metrics. The low success rates for students under 19 is a concern. However, it is difficult to analyze without data as to where these students were struggling.   I think that some of these students just need more time to acclimate to college level instruction, particularly after the pandemic when academic rigor in high schools was decidedly lower. I say that as the parent of a student who was in high school when the pandemic hit. Additionally, young students come to the VWT program for different reasons than our older students who have an affinity for wine or horticulture firmly in place.
I won't dwell on the other metrics here. Sample sizes can be small and data disproportionately skewed because one student drops out or does very well. I am pleased to see that we are doing well with first-generation college students which I assume refers to those who are the first in their families to attend college as opposed to children of immigrants. Lastly, I think we can all agree that we would like to encourage more Black students to join our program, and the wine industry in general.

3. **Retention and Successful Course Completion Rates by Delivery Mode (of Courses Taught through Multiple Delivery Modes, i.e., In-Person, Hybrid, and Online)**

	Retention Rates (Across Three Years)			Successful Course Completion Rates (Across Three Years)		
	In-Person	Online	Hybrid	In-Person	Online	Hybrid
In-Person vs. Online						
VWT-180	85.7%	91.3%		85.7%	*43.5%*	
VWT-190	*	*		*	*	
VWT-290	*	*		*	*	
In-Person vs. Hybrid						
VWT-130	90.0%		93.1%	62.5%		72.3%
VWT-172	*		*	*		*
VWT-173	*		*	*		*
VWT-180	85.7%		95.3%	85.7%		69.8%
Online vs. Hybrid						
VWT-172		76.9%	85.7%		*30.8%*	64.3%
VWT-173		100%	91.2%		50.0%	58.8%
VWT-180		*88.2%*	96.5%		*41.2%*	67.1%
Program Total						
In-Person vs. Online	88.9%	93.5%		74.1%	*48.4%*	
In-Person vs. Hybrid	90.7%		91.9%	70.4%		72.1%
Online vs. Hybrid		87.7%	93.2%		*40.4%*	64.6%
Source: SQL Queries for Fall 2024 Program Review This table compares student performance in courses offered through multiple delivery modes within the same academic year. *Data are suppressed due to size of cohort(s) (N < 10). ***Bold italics*** denote a significantly lower rate within that delivery mode.						

RPIE Analysis: Over the past three years, six courses within the Viticulture and Winery Technology Program were offered through multiple delivery modes within the same academic year. VWT-130 was offered through hybrid and in-person formats in 2021-2022, 2022-2023, and 2023-2024, as were VWT-172 and VWT-173 in 2023-2024. VWT-172, VWT-173, and VWT-180 were offered in hybrid and online formats in 2022-2023. VWT-180 was offered through all three delivery modes in 2023-2024. VWT-190 was offered online and in-person in 2021-2022, 2022-2023, and 2023-2024, as was VWT-290 in 2021-2022 and 2023-2024. This analysis focuses on program-level rates. Details regarding retention and successful course completion rates within individual courses are reported in the table above.

Within the Viticulture and Winery Technology Program:
   o   *In courses that were offered through in-person and online formats, the retention rate in in-person sections reflected the retention rate in online sections. (The difference was not statistically significant.)*
   o   *In courses that were offered through in-person and hybrid formats, the retention rate in in-person sections reflected the retention rate in hybrid sections. (The difference was not statistically significant.)*
   o   *In courses that were offered through online and hybrid formats, the retention rate in online sections reflected the retention rate in hybrid sections. (The difference was not statistically significant.)*

Within the Viticulture and Winery Technology Program:
   o   *In courses that were offered through in-person and online formats, the successful course completion rate in online sections was significantly lower than the successful course completion rate in in-person sections.*
   o   *In courses that were offered through in-person and hybrid formats, the successful course completion rate in in-person sections reflected the successful course completion rate in hybrid sections. (The difference was not statistically significant.)*
   o   *In courses that were offered through online and hybrid formats, the successful course completion rate in online sections was significantly lower than the successful course completion rate in hybrid sections.*

Program Reflection:

The data presented indicate that the online only modality of VWT 180, 172, and 173 was not successful. While I think the story is likely more complicated, I cannot speak much about it. I believe these classes also had a cross-semester component that many students did not understand, which contributed to the poor success rates. The overall success rates for the online forms of the courses compared above are unacceptably low, indicating that changes should be made if these courses run in an online format again. Additionally, both online and hybrid formats of VWT 172 are concerning. I do not quite grasp how these success rates are so much lower than the overall 3-year success rate of VWT 172 65.5%. I believe there may have been cross-section confusion in the particular semester used to create the data above.

VWT 172 is offered 2x per year currently. Moving one of these iterations to a fully in-person format, potentially in a daytime or early evening time slot, could improve student success. Courses that require enrollment in more than one semester for completion should be avoided, however we can work with the college to create some time for end of semester workshops when appropriate.

C. Student Achievement

1. Program Completion

	2021-2022	2022-2023	2023-2024
Degrees			
AS Degrees: VWT.AS, VWT.AS_MRKT, VWT.AS_WNMK	10	6	18
Certificates of Achievement: VWTE.CERT, WINE/CERT, WINEP.CERT, WMKT/CERT	6	4	4
Institutional: AS Degrees	306	287	227
Institutional: Certificates of Achievement	409	384	341
Source: SQL Queries for Spring 2025 Program Review			

RPIE Analysis: The Viticulture and Winery Technology Program conferred 34 degrees and 14 certificates between 2021-2022 and 2023-2024. The Viticulture and Winery Technology Program accounted for 4.1% of the AS degrees awarded by NVC across the three-year period and 1.2% of the certificates conferred over that period. In 2021-2022, the program accounted for 3.3% of AS degrees conferred by NVC. In 2023-2024, the program accounted for 7.9% of AS degrees conferred. The number of degrees awarded by the Viticulture and Winery Technology Program increased by 80% over the three-year period, while the number of AS degrees awarded by the institution decreased by 25.8%.

Program Reflection:

The completion data trend presented here is encouraging as it shows an uptick in program completions last year. Overall, it is difficult to gather much information from small data sets particularly given the singular circumstances created by the pandemic.

2. Program-Set Standards: Job Placement and Licensure Exam Pass Rates

Measure	Program-Set Standard* (& Stretch Goal)	Recent Performance			
		Year 1	Year 2	Year 3	Three-Year Total
Job Placement Rate	60% (75%)	85.7%	82.1%	84.0%	84.1%
Licensure Exam Pass Rate	Licensure exams are not required for this program.				
Sources: Perkins IV Core 4 Employment data for Program (TOP Code: 010400 Viticulture, Enology, and Wine Business) for job placement rates (https://misweb.cccco.edu/perkins/Core_Indicator_Reports/Summ_CoreIndi_TOPCode.aspx).					

RPIE Analysis: The job placement rate among Viticulture and Winery Technology students was 84.1% over the past three years. This rate exceeds both the program-set standard and the stretch goal.

Program Reflection:

This data is another validation of the necessity of Viticulture and Winey Technology pathway to educate our local workforce. It is gratifying to see, but not a surprise given how driven and motivated our students are. The high demand for our students means that while our program may be small relative to the college as a whole, it is very important for the local economy.

Better data as to job placement in the VWT program's 3 areas of instruction (Viticulture, Winemaking, and Wine Marketing and Sales) would inform the creation of new certificates and curriculum. Our advisory committees have requested increased education in consumer-facing wine sales practices.

II.   CURRICULUM

A. Courses

Subject	Course Number	Date of Last Review & Approval by Curriculum Committee *(Courses with last review dates of 6 years or more must be scheduled for immediate review)*	Has Prerequisite/ Corequisite* *Yes/No* **& Date of Last Review**	In Need of Revision *Indicate Non-Substantive (NS) or Substantive (S)* **& Academic Year Anticipated**	To Be Archived *(as Obsolete, Outdated, or Irrelevant)* **& Academic Year Anticipated**	No Change
VWT	130	11/14/2019	No	Yes- NS, Fall 25		X
VWT	132	2/20/2025	No	No		X
VWT	134	2/20/2025	No	No		X
VWT	136	4/9/2015	No	No?		X
VWT	137	4/9/2015	No	No?		X
VWT	140	4/9/2015	No	No?		X
VWT	145	11/21/2024	No	No	Fall 2025	
VWT	147	Unknown	No	Yes- NS, Fall 25		X
VWT	150	2/20/2025	No	No		X
VWT	151	2/20/2025	No	No		X
VWT	152	2/20/2025	No	No		X
VWT	153	2/20/2025	No	No		X
VWT	154	2/20/2025	No	No		X
VWT	172	3/11/2021	No	Yes		X
VWT	173	3/11/2021	No	Yes		X
VWT	180	4/8/2021	No	Yes		X
VWT	190	12/14/2023	No	No		X
VWT	191	12/14/2023	No	No		X
VWT	229	2/20/2025	No	No		X
VWT	230	2/20/2025	No	No		X
VWT	231	2/20/2025	No	No		X
VWT	232	2/20/2025	No	No		X
VWT	233	11/14/2019	Yes	Yes- NS Fall 25		X
VWT	234	11/14/2019	No	Yes- NS Fall 25		X
VWT	241	4/9/2015	No	Yes- NS Fall 25		X
VWT	270	4/8/2021	No	Yes		X
VWT	271	3/11/2021	No	Yes		X
VWT	272	2/20/2025	No	No		X
VWT	275	2/20/2025	No	No		X
VWT	280	4/11/2019	Yes	Yes- NS Fall 25		X
VWT	281	4/9/2015	No	Yes- S Fall 25		X
VWT	282	11/21/2024	No	No	Fall 2025	Possible Re-instatement
VWT	283	3/11/2021	No	Yes		X
VWT	288	11/21/2024	No	No	Fall 2025	
VWT	290	12/14/2023	No	No		X
VWT	291	12/14/2023	No	No		X

*Note: Prerequisites need to be validated (in subsequent process) through Curriculum Committee.

Program Reflection:

 I updated the curriculum for 13 VWT courses this past fall. Curriculum updates will continue and input from faculty experts will be solicited. These updates did not significantly alter course content, but rather updated terminology and format.

Additionally, two new classes, Wine Hospitality, VWT-160 and European Viticulture, VWT-170 were written and are currently awaiting final approvals.

European Viticulture is a short-term study abroad course and is planned for summer 2026. New study abroad classes have been encouraged at NVC, and VWT classes exploring the industry abroad are aligned with the program and the goals of study abroad in general. The first run of the course will be a pilot involving viticulture-focused study in France, but curriculum, destination and format can be adjusted to suit student needs.

Wine Hospitality will be offered annually, likely in Spring semesters. This course addresses a specific need in the local workforce. Industry partners and our VWT Advisory Committee have asked for this class, and for further education in Wine Marketing and Sales. Classes to expand wine-industry specific sales education have been requested by industry leaders at VWT Advisory Board meetings. The addition of a class focusing on training students for Direct-To-Consumer (DTC) sales, including training on wine club and tasting room management is under discussion.

Summer Winery Operations, VWT 282, may be reinstated as students continue to inquire about it. This would fit well with expanded wine production in the future will require more summer-time winery activities but is not appropriate for 2025 or likely 2026.

There could also be a reinstatement of VWT-288, Current Topics in Wine, which would simply allow students 1-unit of credit for participation in the weekly tastings and seminars that Paul Wagner and Enoch Shully have been conducting. This could ideally run without impacting community participation in the seminars and regardless of the number of enrollees.

B.   Degrees and Certificates+

Degree or Certificate & Title	Implementation Date	Has Documentation Yes/No	In Need of Revision+ and/or Missing Documentation & Academic Year Anticipated	To Be Archived* (as Obsolete, Outdated, or Irrelevant) & Academic Year Anticipated	No Change
Viticulture: AS	BOT Pre-Fall 2006	Yes			X
Wine Marketing and Sales: AS	BOT Pre-Fall 2006	Yes			X
Winemaking: AS	BOT Pre-Fall 2006	Yes			X
Viticulture and Enology: COA	BOT Pre-Fall 2006	Yes			X
Wine Marketing and Sales: COA	BOT Pre-Fall 2006	Yes			X
Wine Production: COA	5/12/2022	Yes			X
Vineyard Management: Local	5/12/2022	No		2025-2026	
Vineyard Pest Scout: Local	5/12/2022	No	X: Conversion to COA 8		
Vineyard Pruning: Local	5/12/2022	No			X
Viticulture Operations: Local	5/12/2022	No			X
Wine Laboratory Technician: Local	5/12/2022	No	X: Conversion to COA 8		
Winery Management: Local	5/12/2022	No		2025-2026	
Winery Operations: Local	5/12/2022	No			X

*Note: Discontinuance or archival of degrees or certificates must go through the Program Discontinuance process or the Program Archival Task Force.

+Degrees and Certificates cannot be implemented until the required courses in them are approved and active.

Program Reflection:

New legislative updates allow Certificates of Achievement totaling 8 to 12 units. Previously the minimum load for a Certificate of Achievement was 12 units. Certificates of Achievement (COA's) are preferrable to "Local" Certificates because COA's are conferred by the state as opposed to the college and they appear on student transcript whereas local certificates do not.

There is a new 9-unit COA in Wine Hospitality that is currently working its way through the approval process. This is in response to Industry demand. This certificate adds an important component to our program and meets a documented need in the wine industry.

Additionally, converting the Vineyard Pest Scout and the Wine Laboratory Technician local certificates to COA's will better serve students. These certificates are well-aligned with the goal of allowing students to document the specialized skill sets they have attained in the program. The process of converting these certificates to COA's is slow because the initial justifications and records for these local certificates were lost as the institution transitioned from Curricunet software to the Courseleaf system. This means that the COA's must be created from scratch, even though they are replacing existing local certifications. This is unnessarily time consuming and inefficient.

The Vineyard Operations and Winery Operations local certifications should stay as is for the time being. These are less obviously tied to specific career skill sets than the above certificates but could be useful for documenting completion of certain course pathways.

The Pruning certification cannot become a COA because it is only 4 units. It should remain a local certification.

The Vineyard Management and Winery Management local certificates should be altered or archived. Students would not be considered ready for Vineyard or Winery Management positions upon completion of these certificates without significant experience and/or additional education. Thus, these certifications are misleading to students seeking such positions. A student receiving a "Pest Scout" Cert would be considered job ready for pest scouting whereas a student with only a Vineyard Managment Certificate as written would not be ready for vineyard management position.   Students seeking management level qualifications should be focused on the Viticulture and Winemaking AS degrees or the Viticulture and Enology COA. To date, I do not believe we have had more than one completion of these local certs.

III.   LEARNING OUTCOMES ASSESSMENT

A.   Status of Learning Outcomes Assessment

Learning Outcomes Assessment at the Course Level

Number of Courses	Number of Courses with Outcomes Assessed		Proportion of Courses with Outcomes Assessed	
	Over Last 4 Years	Over Last 6 Years	Over Last 4 Years	Over Last 6 Years
35	10	17	29%	49%

Learning Outcomes Assessment at the Program/Degree/Certificate Level

Degree/Certificate	Number of Outcomes*	Number of Outcomes Assessed		Proportion of Outcomes Assessed	
		Over Last 4 Years	Over Last 6 Years	Over Last 4 Years	Over Last 6 Years
VWT	4	0	2	0	50%

Program Reflection:

Our VWT courses are in need of Student Learning Outcome (SLO) assessment as it appears more than 50% have not been assessed in the past 6 years. In the past year, SLO assessment has moved onto the Nuventive Solutions software platform. Additional training on this software is necessary and ideally should be provided to all VWT faculty so that instructors can review their own courses without relying on the Program Coordinator. Currently, I am the only one with access to this software and I myself need further training. This is a work in progress.

B.   Summary of Learning Outcomes Assessment Findings and Actions

As stated above, there are some roadblocks here. Nuventive reports on SLO Assessment have returned mostly data from assessments from 2014 and earlier. The most recent assessment in 2024-20225 report was one SLO assessment of VWT 233 from 2020. However I know from previous program reviews and the data presented above that 50% of courses have been assessed in the past 6 years. From what I know of previous assessments, the VWT program is meeting our course SLO's in all assessed areas.

Program Reflection:

See above

IV.   PROGRAM HIGHLIGHTS

The program-level plan that emerged from the last review (completed Spring 2023) included the following initiatives:

1. Add 3 additional viticulture evening sections
2. Add (5) winemaking sections which culminate in a certificate to overcome distance barriers to pursuing education
3. Develop a Bachelor's Degree in Winery Operations which emphasizes all 3 aspects of the VWT Program: Viticulture, Winemaking, Marketing & Sales
4. Increase NVC student achievement and completion of educational and job training goals: Updated Teaching Station Which Supports Web-Based Instruction
5. Hire a full-time Wines Sales & Marketing professor
6. Construction of two sensory analysis laboratories (classrooms) and renovation of agriculture lab into a wine sales/marketing/hospitality training center.
7. Establish a Vineyard on at Mt. Veeder college property
8. Purchase a conservation seed drill to enalble no-till vineyard floor management, a practice known to improve soil organic matter and C sequestration ability

A.   Accomplishments/Achievements Associated with Most Recent Three-Year Program-Level Plan

4 & 6: The Wine Education Center is nearly complete!   This will mean across the board improvements in the level of instruction, particularly in lab work focused classes and wine sensory/ appreciation courses.

Phase 2 of this project will create a lab space for wine sales and hospitality work. It will also provide some space for culinary students to showcase their creations.

This new space will include an updated teaching station and enhanced capabilities for hybrid distance education.

B.   Recent Improvements

- Faculty and staff were involved in much of the planning for the wine education center. Because of this, additional sinks and plumbing were planned for the sensory classrooms, these classrooms will have some improved capabilities for webcasting.
- Paul G implemented a strategy to increase student access by teaching the same class on alternating weeks in the same time slot. This seems to have worked although the jury is still out on how this is impacting student success.
- The presence of the VWT program in wine industry events has increased awareness of our degree and certificate programs.
- The replacement and retooling of the winery manager position has been create a lot of activity and accolades for our progam.

C. Effective Practices

> Please see section 1A of this document where some of our programmatice strengths are discussed. Additionally I would add:
>
> - Hands on education- there is no substitute, and we provide it.
>   Interaction with the wine industry we serve. Students learn first-hand from industry leaders as guest speakers and through field trips. The ability to see the things you have been learning about and practicing, being implemented at a high level in the industry, creates many aha moments.
>
> - The vineyard replant continues. This project will enhance viticultural coursework, winemaking coursework through the improvement of grape quality, and vineyard sustainability. New rootstock plant material will create more drought tolerance and resilience in the vineyard. The installation of demonstration and experimental areas will give students the ability to see varieties and training systems that are less common in our area.
>
> - Practices to improve community outreach have been highly successful. These include weekly the weekly wine tasting events previously noted and participation in events such as the Unified Wine and Grape Symposium and various local career fairs.

V.   PROGRAM PLAN

A.   Based on the information included in this document, the program is described as being in a state of:

- ○   Viability
- ○   Stability
- ☑   Growth

*Please select ONE of the above.

This evaluation of the state of the program is supported by the following parts of this report:

 (Identify key sections of the report that describe the state of the program. Not an exhaustive list, and not a repeat of the report. Just key points.)
Job placement rates.
Relativley stable enrollments and class sizes- enrollment data.
Lists of strengths.
Alignment with college mission.
Importance of our program to the Napa Valley workforce.
Opening of new WEC and vineyard replant.

B.   Outline the three-year plan for the program by completing Columns A – D of the Three-Year Program Planning Template (the Excel file that will accompany the Program Review Report). For the fall 2024 program review cycle, the 3-year program plan will span 2025-2026 through 2027-2028.

VI. **RESOURCES NEEDED TO IMPLEMENT PROGRAM PLAN**

A. Describe the current state of program resources relative to the plan outlined above. (Resources include: personnel, technology, equipment, facilities, operating budget, training, and library/learning materials.) Identify any anticipated resource needs (beyond the current levels) necessary to implement the plan outlined above.

Description of Current Program Resources Relative to Plan:

> One issue that makes planning difficult is that faculty are largely unaware of available resources. When I first started, I was informed that there was little to no budget for additional vineyard support. However, I later learned that the Vineyard prior to 2015 was largely farmed by a vineyard management company, which costs a significant amount of money. I routinely recieve comments about how the vineyard looks shabby and dilapidated yet when I do hire people for work they do not get paid for months at a time.
>
> Between the vineyard, winery, and lab classroom and all of the specialized equipment involved, VWT needs a significant operating budget. It would be helpful to come up with some spending targets so that we can triage needs and optimize spending. Of course, spending should automatically adjust for inflations.
>
> Another issue is that our program cannot continue to grow and expand offerings because of unit restrictions. There is significant demand in the industry for more training in wine marketing and sales, particularly for direct-to-consumer sales roles like wine club management and tasting room management. However, it is difficult to add classes, even if they are popular and in response to industry needs.

B. Identify the resources needed in order to implement each component of the three-year plan for the program by completing Columns E – F of the Three-Year Program Planning Template (the Excel file that will accompany the Program Review Report). If more than one type of resource (e.g., operating expenses, technology, supplies, facilities, equipment, etc.) is needed to implement the initiative, list each need on consecutive rows following the unit-level initiative.

Note: Resources to support program plans are allocated through the annual planning and resource allocation process (not the program review process).

The completed Three-Year Program Planning Template will serve as a draft/starting point for upcoming annual planning and resource allocation cycles.

	A	B	C	D	E	F
PROGRAM:		VWT				
PLANNING YEARS:		2025-2026 through 2027-2028				
	Program/Service	Unit-Level Initiative	Anticipated Year of Implementation	Anticipated Outcome of Initiative	Description of Resource Need	Type of Resource Need
	VWT	Vineyard Replant- The student vineyard replant project needs to finish up.	2027-2028	The expected outcome is a fulling operational vineyard, producting sufficient quanitities of high quality fruit for our winemaking program and providing a living lab for our viticulture program	Ongoing labor and repairs. Other similar programs have ongoing relationships with vineyard management companies. We need a stable relationship with a VMC and/or FLC.	Other
	VWT	No-till Seeder	2027-2028	Enhanced our level of regenerative farming.	New seeder	Equipment (other than Technology)
	VWT	Additional lab equipement	2025-2026	A deliverable improvement in lab education.	Sufficient new lab equipment: pippettes, burettes, stir plates, pH meters, refractometers etc. to be used in the new more complete lab	Equipment (other than Technology)
	VWT	LAMP assay capabilities	2025-2026	Updated pest management curriculum to meet the current industry best practices for Grapevine Red Blotch control, and enhance viability and lifespan of the the new vineyard.	A small water bath, the appropriate primers, promoters, an conrol specimens, and other lab supplies for in house virus testing.	Equipment (other than Technology)
	VWT	Deer Fence	2025-2026	Protection of vineyard from increasingly problematic deer damage. Deer eat signifcant quanitiies of shoots and fruit.	A vineyard perimeter fence	Facilities
	VWT	Insurance Plan for Tasting classes	2025-2026	Steady funds for wines purchases in wine tasting classes wherein certain numbers of enrollments necessitate double the wine purchases with only a few more lab fees supporting this spending.	Backup money for wine appreciation courses.	Other
	VWT	All advantages taken of new facillity.	2026-2027	Potential use and impact of the WEC is maximized	Enhanced use, improved enrollments, student retention and learning.	Facilities
	VWT	Enhanced Security	2025-2026	Protection of all VWT spaces from vandalism, break ins, and theft.	Web monitoring, alarmed doors, improved lighting.	Facilities

Completed by Supervising Administrator:

> Dr. Douglas C. Marriott

Date:

> April 25, 2025

Strengths and successes of the program, as evidenced by analysis of data, outcomes assessment, and curriculum:

> Professor Hodgins captured many strengths of the program, notably continually working to align with industry norms and needs, the work of Enoch Shully and Paul Wagner with industry events that happen on a weekly basis for our students, alumni, and community, and the Wine Education Center that will open in Fall of 2025. I would add the program benefits from two full time Instructional Assistants, a Winery Operations Manager, and support from the NVC Foundation for both helping secure funding for the WEC and specialized scholarships for students.

Areas of concern, if any:

> Ensuring positive transitions for the Program Coordinator and Winery Production Manager, alignment of the VWT Foundation and program, having staff trained on the current equipment in the winery and integrating this into the curriculum, support for large capital expenses for vineyard and winery.

Recommendations for improvement:

> See concerns.

Additional information regarding resources:

> We have Strong Workforce and Perkins Funds that have helped address needs in the vineyard as well as donated funds from Darioush Vineyard that go through the foundation. It would be good to work with the Winery Operations Manager, the Production Manager, and the Vineyard Manager to standardize operational costs as cited by Professor Hodgins to ensure items may be addressed in a timely fashion. For large expenditures for equipment, it is important to ensure proper training and integration in the curriculum plans prior to funding approval.