2025-2026 Instructional Program Review - Woodworking Manufacturing Technology Latest Version

Self-study template for Instructional Program Review process. Visitation Year: 2025-2026. Review period: 2019-2020, 2020-2021, 2021-2022, 2022-2023, 2023-2024, and 2024-2025

Instructional Program Review Overview

Section 1. Instructional Program Overview

A. Mission Alignment : Version by **Loucks, Eric** on **04/27/2026 22:12**

1. *Explain how your program supports the College's Mission and Students First Framework* (https://www.cerritos.edu/students-first-framework/default.htm).
The Woodworking Manufacturing Technologies (WMT) department directly supports the Cerritos College Mission by providing high-quality, accessible career technical education that prepares a diverse student population for employment, transfer, and lifelong learning. Consistent with the College's commitment to "educating students to achieve their academic and career goals, to succeed in a global society, and to transform their lives through comprehensive educational opportunities," WMT offers industry-aligned instruction that integrates technical skill development, design thinking, safety, and professional practice within an inclusive and supportive learning environment. Our department's emphasis on hands-on learning, modern manufacturing technologies, and applied problem-solving prepares students for immediate entry into the various woodworking industries, while also fostering the creativity, critical thinking, and adaptability required for long-term career mobility.

WMT's mission to deliver excellence through innovative programs, equity-minded practices, and a strong culture of safety and community aligns closely with the Cerritos College Students First Framework. The program advances the framework's **Learning** and **Career and Transfer Success** pillars by offering rigorous, outcomes-driven curriculum in traditional woodworking, Computer Numerical Control (CNC) machining, and emerging digital fabrication programs that reflect current industry standards and labor-market demand. Advisory Committee guidance, Lightcast labor-market data, and ongoing curriculum updates ensure that students acquire relevant, high-wage, high-skill competencies that support completion, employment, and advancement.

WMT also contributes to the **Culture of Care and Equity** priorities of the Students First Framework by fostering an inclusive, supportive, and safety-centered instructional environment. Student survey[1] results and program practices demonstrate a strong sense of belonging, mentorship, and community[2], particularly for adult learners, career changers, and historically underrepresented students. The program's focus on accessible pathways, flexible scheduling, and comprehensive instructional support promotes persistence and success for a diverse student population.

Lastly, the department supports the **Institutional Health and Sustainability** goals of the framework by responsibly stewarding prior investments in facilities, equipment, and staffing; maintaining a strong safety and maintenance culture; and strategically expanding curriculum. The recent approval and active recruitment of a fourth full-time faculty member reflects institutional recognition of sustained enrollment growth and program impact. Further strengthening the program's capacity to support student learning, workforce preparation, and long-term regional economic development.

Together, WMT's mission, curriculum, and student-centered practices demonstrate clear alignment with the Cerritos College Mission and the Students First Framework by advancing equitable access, high-quality learning, workforce relevance, and a supportive environment that empowers students to achieve their educational and career goals.

[1]In March 2025, with the help of Esthela Chavez from IERPG (Institutional Effectiveness, Research, Planning, and Grants), the Woodworking Manufacturing Technologies program distributed a student survey via email to 345 students. The contact list included students who had earned a WMT degree or certificate within the past six years, students currently declared as WMT majors, and students actively enrolled in a WMT course. Of the 345 emails, 342 were successfully delivered. A total of 146 recipients opened the survey invitation, resulting in a 42.7% response rate, and 137 students completed the full survey, representing a 93.8% completion rate among those who opened the email. This strong completion rate provided meaningful student feedback regarding program strengths, student needs, barriers to success, and areas for future improvement, helping to inform program planning, resource requests, and long-term departmental goals.

[2]Our community is most notably recognized through our student club, CSAW or the Cerritos Student Association of Woodworkers. The club helps build community beyond the classroom by creating opportunities for students to connect, collaborate, and grow within the woodworking field. CSAW supports students through learning through collaboration between beginning and advanced students, stronger shop culture, and a shared environment centered on craftsmanship, safety, and professional development. Newer students benefit from working alongside more experienced peers, gaining exposure to higher-level work, techniques, and professional expectations. The club also encourages involvement in campus events, outreach, guest speakers, industry networking, and special projects that help students engage more deeply with the profession. Because many WMT students are adult learners, career changers, or returning students, CSAW plays an important role in creating a sense of belonging and connection within the department. It helps strengthen the community side of the program, making the shop not just a place to learn skills, but a place to build lasting professional and personal relationships.

B. Degrees and Certificates : Version by **Loucks, Eric** on **01/31/2026 00:04**

Degree	Type (Cert., AA, AA-T, AS, AS-T)	Units or Courses Required
Spring 2026 & Prior		
Woodworking Manufacturing Technologies	AS	60 Degree Units / 24-31.5 Major Units
Woodworking Manufacturing Technologies	Cert	24-31.5 Certificate Units
Woodworking Manufacturing Technologies: Cabinetmaking	AS	60 Degree Units / 22-28 Major Units
Woodworking Manufacturing Technologies: Cabinetmaking	Cert	22-28 Certificate Units
Woodworking Manufacturing Technologies: CNC Woodworking	Cert	19-24 Certificate Units
Woodworking Manufacturing Technologies: Furniture Making	AS	60 Degree Units / 25.5 FT Intensive or 27 PT Major Units
Woodworking Manufacturing Technologies: Furniture Making	Cert	25.5 FT Intensive or 27 PT Certificate Units
Beginning Fall 2026		

Degree	Type (Cert., AA, AA-T, AS, AS-T)	Units or Courses Required
Woodworking Manufacturing Technologies	AS	60 Degree Units / 18-19 Major Units
Woodworking Manufacturing Technologies	Cert	18-19 Certificate Units
Woodworking Manufacturing Technologies: Cabinetmaking	AS	60 Degree Units / 18-19 Major Units
Woodworking Manufacturing Technologies: Cabinetmaking	Cert	18-19 Certificate Units
Woodworking Manufacturing Technologies: CNC Woodworking	Cert	19-24 Certificate Units
Woodworking Manufacturing Technologies: Furniture Making	AS	60 Degree Units / 25.5 FT Intensive or 18-19 PT Major Units
Woodworking Manufacturing Technologies: Furniture Making	Cert	25.5 FT Intensive or 18-19 PT Certificate Units
Woodworking Manufacturing Technologies: Furniture Design	AS	60 Degree Units / 18-20 Major Units
Woodworking Manufacturing Technologies: Furniture Design	Cert	18-20 Certificate Units

Section 2. Instructional Program Trends

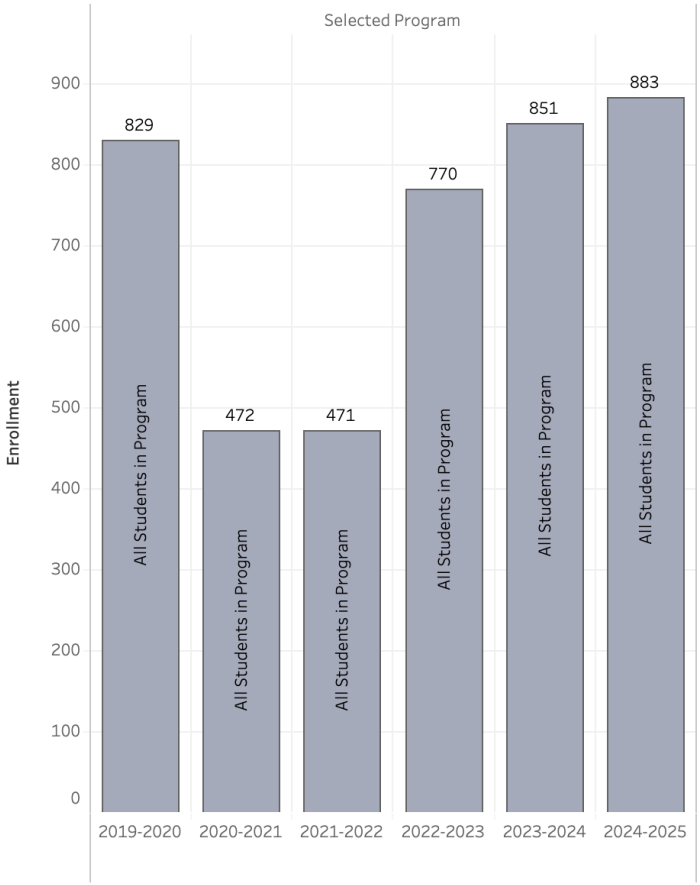
A. Program Data : Version by **Loucks, Eric** on **04/27/2026 22:12**

1. Describe your student demographics (race/ethnicity, gender, age, and others that might be relevant). Consider the following questions when writing your response:

- ***How do the demographics of your program and its related courses compare with the college as a whole?***
- ***Have they changed over time?***

Show Annual Plan Question | Show IPR Question

Division: Technology | Department: WMT | Subject: WMT

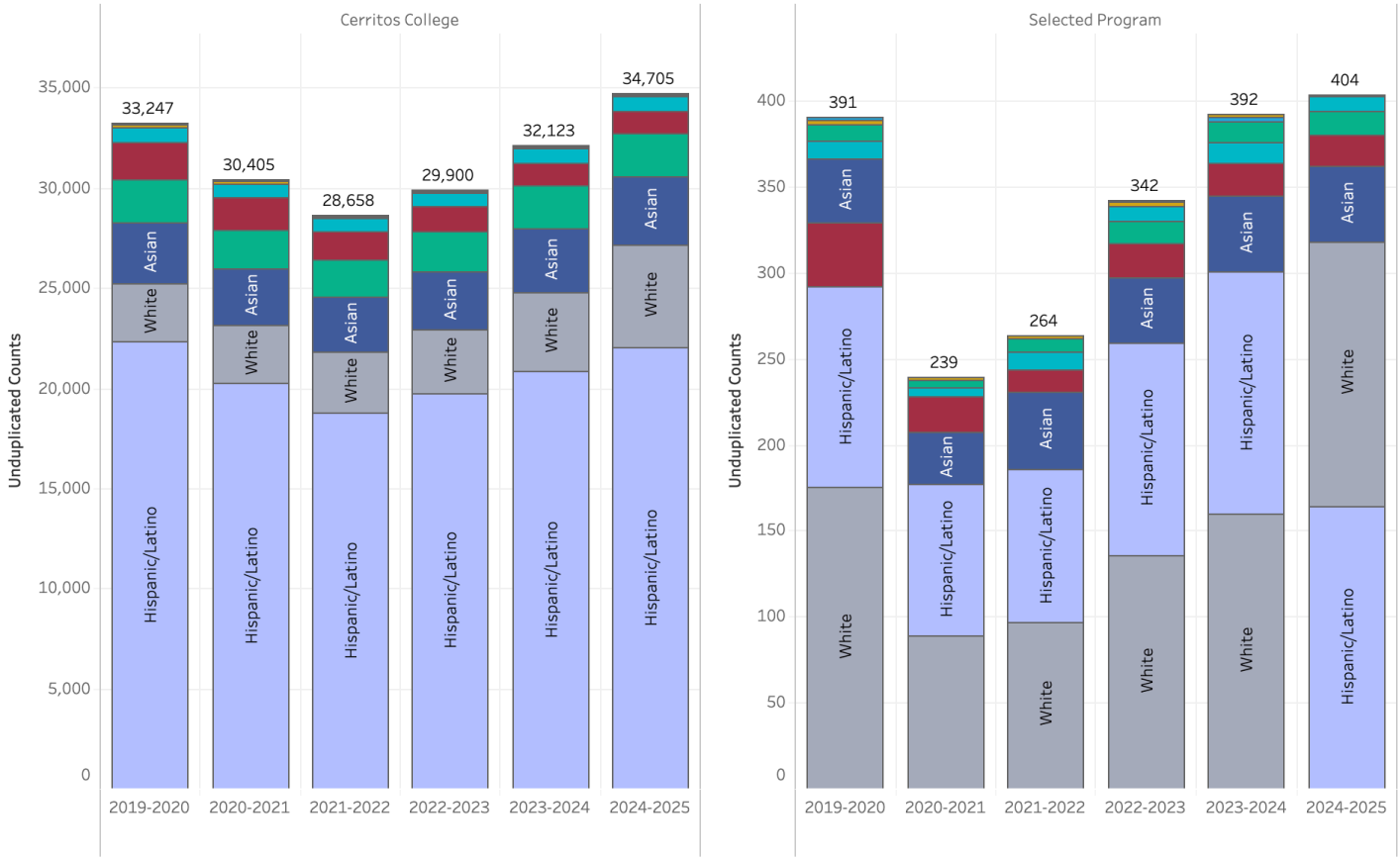


Population to Display: Cerritos College | Select Characteristic to Diaggregate: All Students | Select Display: Graph

Graph Legend: All Students in Pr...

Show Annual Plan Question | Show IPR Question

Division: Technology | Department: WMT | Subject: WMT



Population to Display: Cerritos College

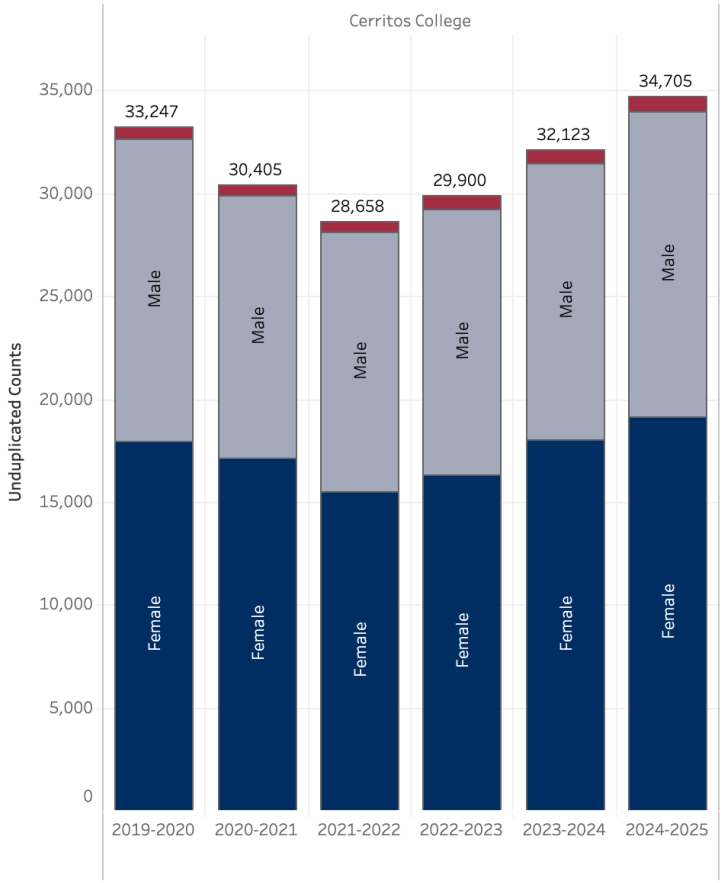
Select Characteristic to Diaggregate: Race/Ethnicity

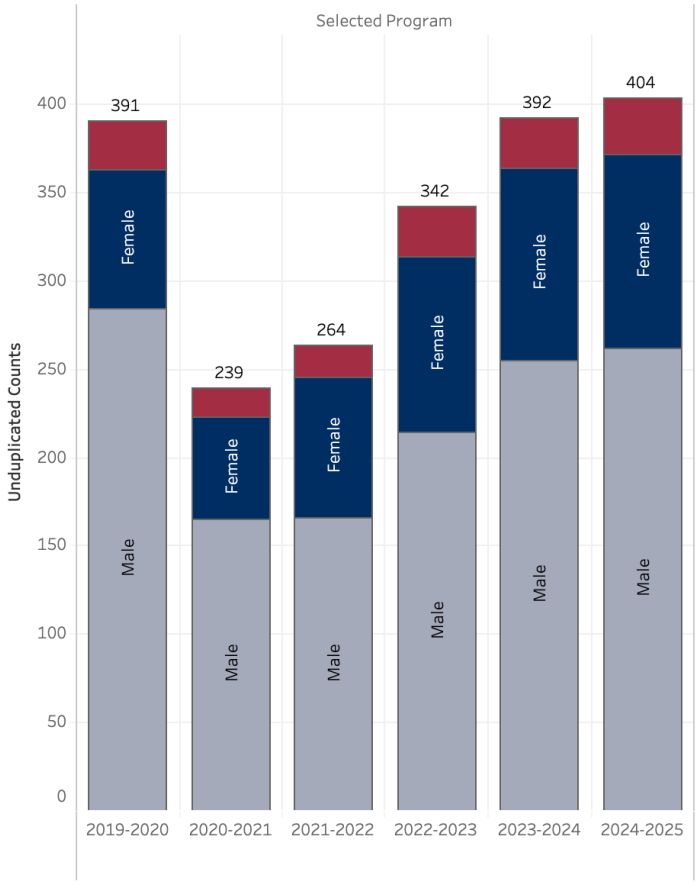
Select Display: Graph

Graph Legend: American Indian ... | Asian | Black or African ... | Hispanic/Latino | Native Hawaiian ... | Two or More Races | Unknown

Show Annual Plan Question | Show IPR Question

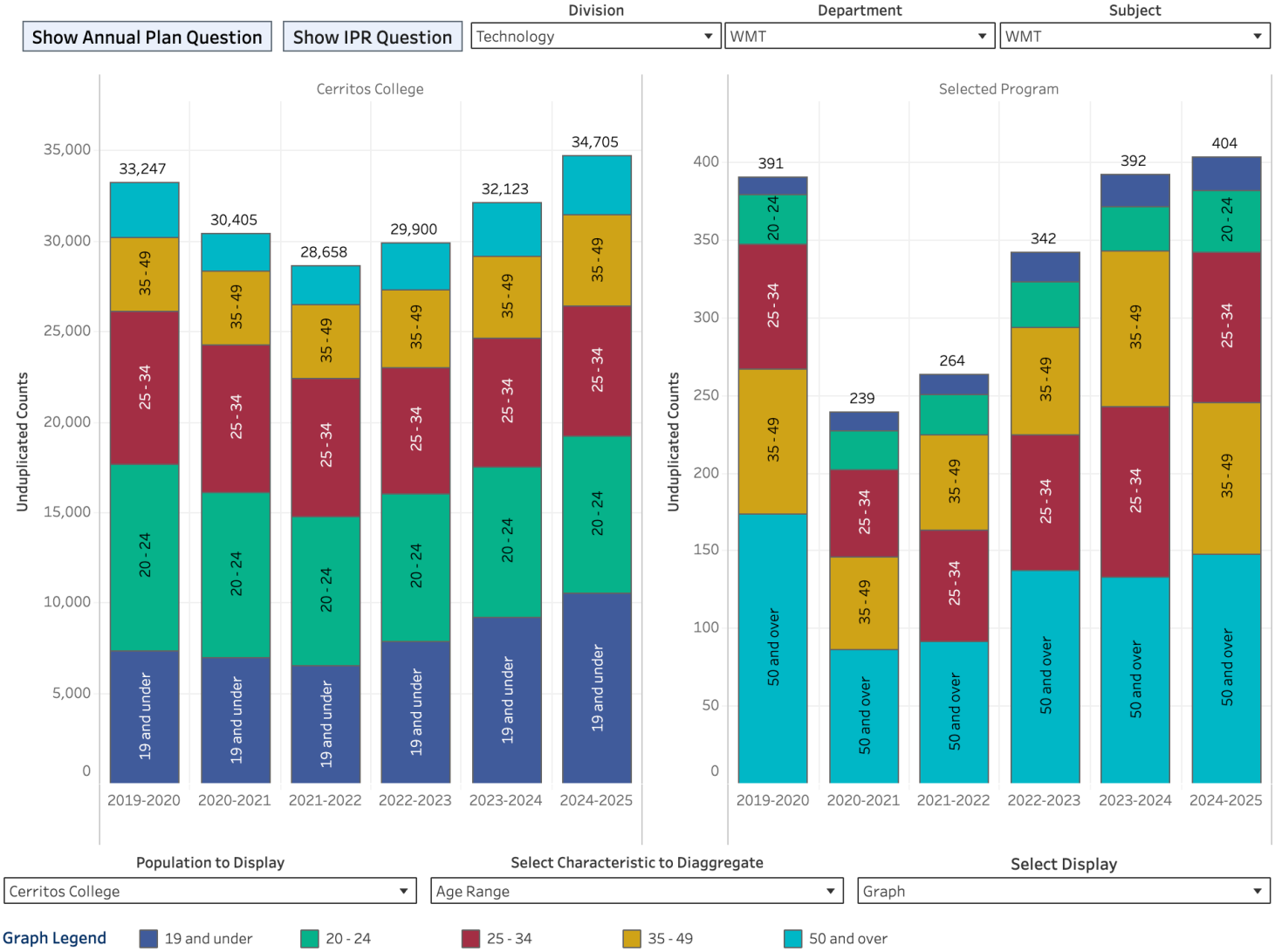
Division: Technology | Department: WMT | Subject: WMT





Population to Display: Cerritos College | Select Characteristic to Diaggregate: Gender | Select Display: Graph

Graph Legend: Female | Male | Unknown



WMT serves a diverse and primarily workforce-oriented student population that differs in important ways from the overall Cerritos College student body. Consistent with its role as a career technical education program, WMT enrolls a substantially higher proportion of adult learners than the College as a whole. Students age 25 and older comprise the majority of enrollments, with particularly strong representation in the 35–49 and 50-and-over age groups. While participation among students ages 19 and under and 20–24 has increased modestly in recent years, the program continues to function primarily as a reskilling and career-transition pathway for working adults and mid-career learners in the region.

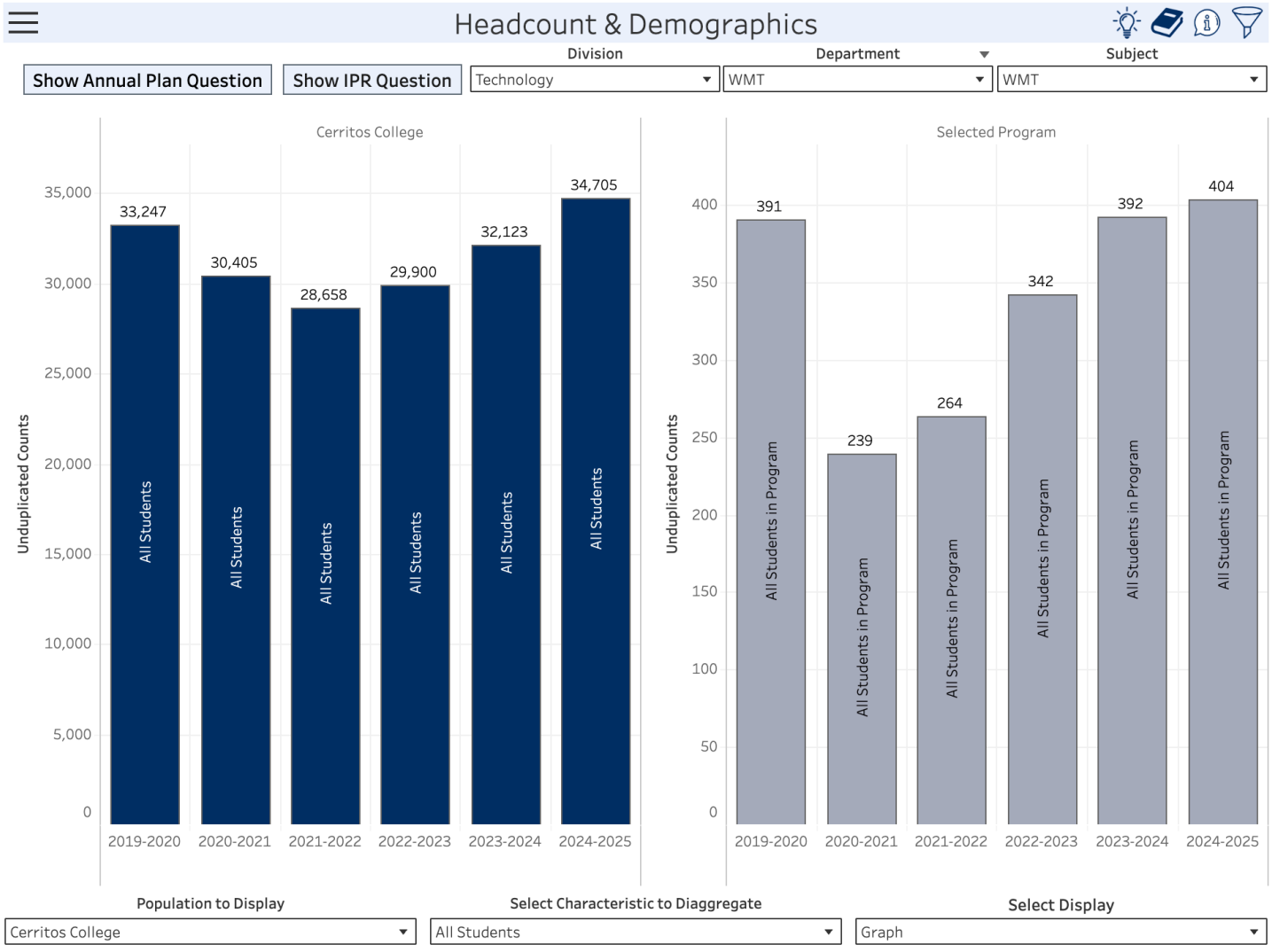
In terms of gender, WMT remains a male-dominant program, reflecting long-standing patterns in the woodworking, cabinetmaking, and advanced manufacturing industries. Female participation increased between 2020–2021 and 2021–2022, but has remained relatively stable in the most recent three years, with overall enrollment growth occurring primarily among male students. While women remain underrepresented relative to the College as a whole, the program is actively working to address this gap through targeted outreach and representation strategies. These efforts include incorporating female representation in program marketing materials and outreach efforts, as well as fostering an inclusive, safety-centered shop culture that supports retention and long-term participation. Collectively, these strategies aim to increase both access and persistence among women in the program.

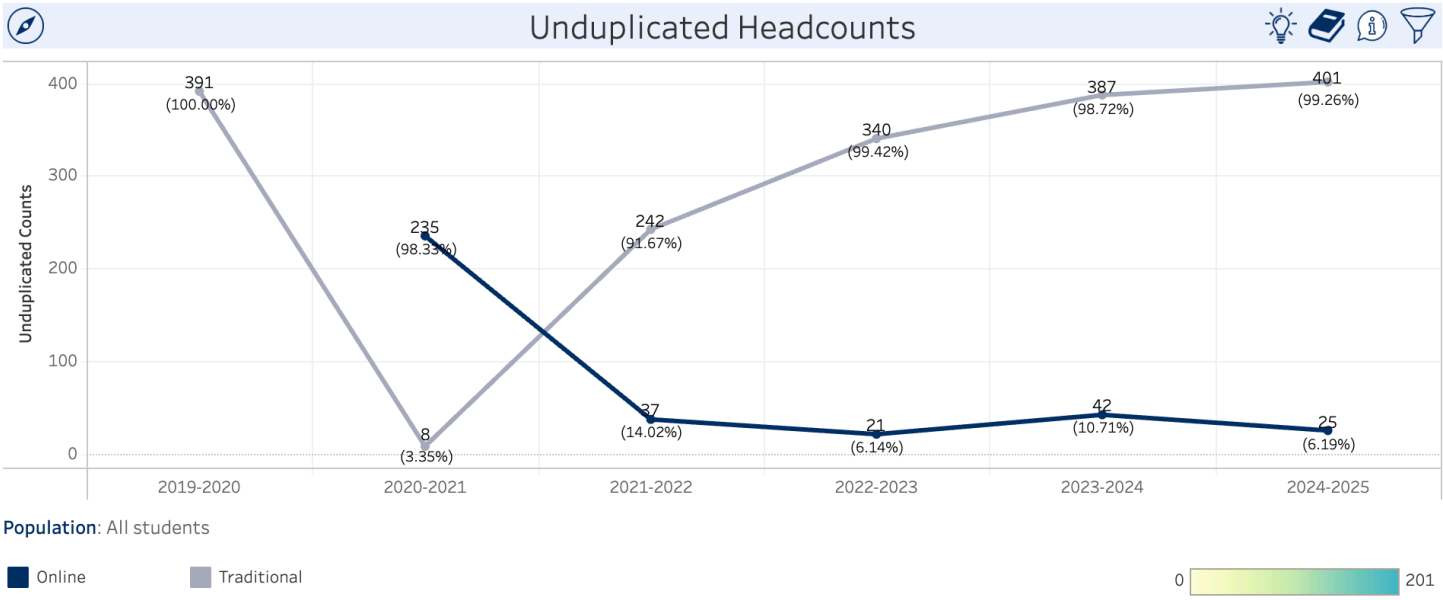
The racial and ethnic composition of the WMT student population broadly reflects the diversity of the College's service area. Hispanic/Latino and White students comprise the largest groups, followed by Asian students, with smaller but growing representation among Black/African American and other historically underrepresented populations. Over time, the proportion of Hispanic/Latino students has increased in alignment with regional demographics and the College's mission to serve first-generation and historically marginalized communities. Representation across other racial and ethnic groups has also grown in absolute numbers as overall program enrollment has expanded.

Collectively, these demographic patterns indicate that WMT primarily serves an adult, career-focused, and increasingly diverse student population, with gradual progress toward greater gender and racial/ethnic inclusivity. These characteristics provide important context for subsequent analysis of enrollment trends, success and retention outcomes, equity gaps, and programmatic strategies discussed in the following sections.

2. Headcount (unduplicated) and enrollment (duplicated) in the program. Consider the following questions when writing your response:

- ***Identify enrollment trends.***
- ***Have there been an increase or decrease in enrollment in the last year?***
- ***Are there differences in trends when you disaggregate the data (e.g., online versus face-to-face, demographics, special populations, etc.)?***
- ***How will enrollment trends affect staffing decisions?***





Both headcount (unduplicated) and enrollment (duplicated) in WMT show a clear pattern of pandemic-related decline followed by sustained and accelerating recovery. Unduplicated headcount decreased sharply from 391 students in 2019-2020 to 239 in 2020-2021, reflecting the immediate impact of COVID-19 on in-person, lab-intensive instruction. Headcount stabilized in 2021-2022 (264 students) and then increased steadily in the subsequent three years, reaching 404 students in 2024–2025, the highest level in the six-year period. This represents a 19% increase over the prior year and confirms that demand for the program continues to grow.

Duplicated enrollment follows the same trajectory. Enrollment fell from 829 in 2019-2020 to a low of 471 in 2021-2022, then rebounded strongly to 770 in 2022-2023, 851 in 2023-2024, and

883 in 2024-2025. The most recent year reflects continued growth rather than stabilization, indicating that recovery is not merely a return to pre-pandemic levels but an expansion beyond them. This sustained upward trend aligns with regional labor-market demand for skilled trades, cabinetmaking, CNC machining, and digital fabrication, and with the program's expanded curriculum and improved facilities.

Disaggregated data show that the program has returned predominantly to in-person instruction, which is appropriate for a hands-on, equipment-intensive discipline. Traditional (in-person) headcount declined dramatically in 2020–2021, while online enrollments temporarily increased; however, as on-campus instruction resumed, in-person participation rebounded sharply and now accounts for the vast majority of enrollments. This confirms that student demand is tied to access to physical labs, machinery, and studio-based learning rather than fully online delivery.

When viewed alongside demographic trends, enrollment growth has occurred across age groups, gender, and racial/ethnic categories, with particularly strong increases among adult learners and working professionals. This broad-based recovery suggests that the growth is structural rather than isolated to a single population or course.

The sustained increase in both headcount and enrollment has direct implications for staffing and instructional capacity. Higher enrollments in lab-based courses increase demands on faculty load, lab supervision, safety oversight, equipment maintenance, and student support. The program's recent approval to recruit a fourth full-time faculty member reflects institutional recognition of this growth and the need to maintain instructional quality, student safety, and timely course availability. Continued enrollment expansion will further intensify the need for stable full-time staffing and adequate technical support to ensure that students can complete required sequences without bottlenecks and that the program can continue to meet industry and accreditation standards.

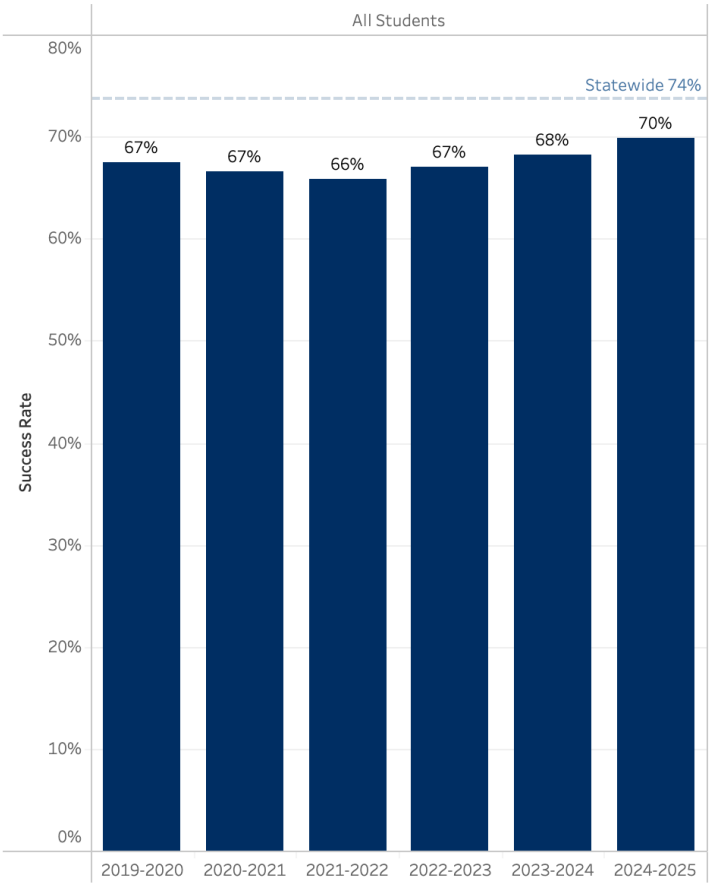
3. Discuss the program's success and retention rates, addressing any performance gaps if success rates are lower for disproportionately impacted students. Consider the following questions when writing your response:

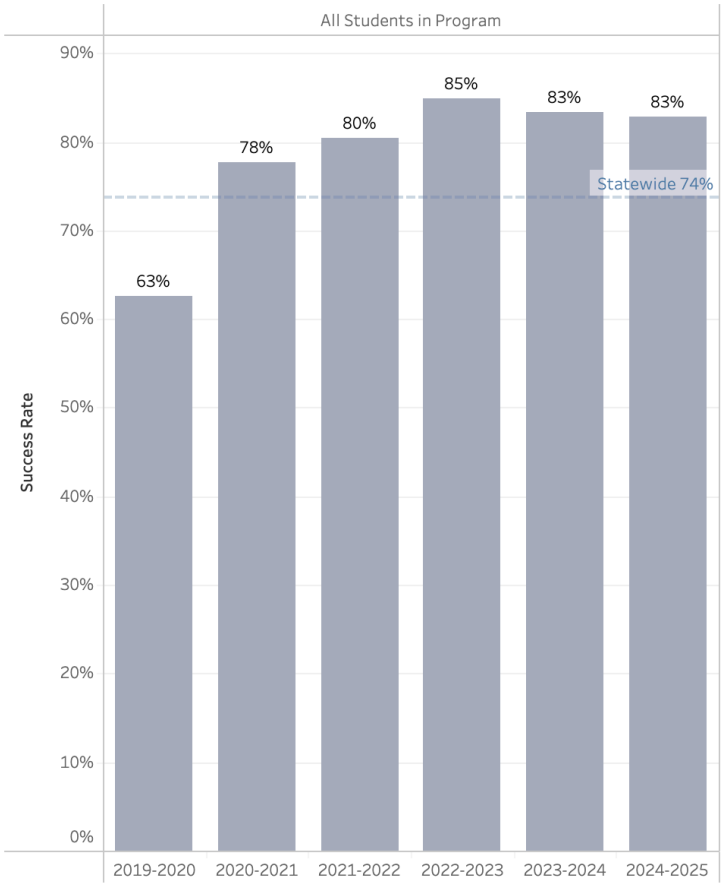
- ***How have the success and retention rates changed over time?***
- ***Are there particular courses that have particularly low rates and may prove a barrier to program completion?***

Course Success & Course Completion

Division: Technology | Department: WMT | Subject: WMT

Show Annual Plan Question | Show IPR Question





Select Success or Course Completion: Success Rate

Population to Display: Cerritos College

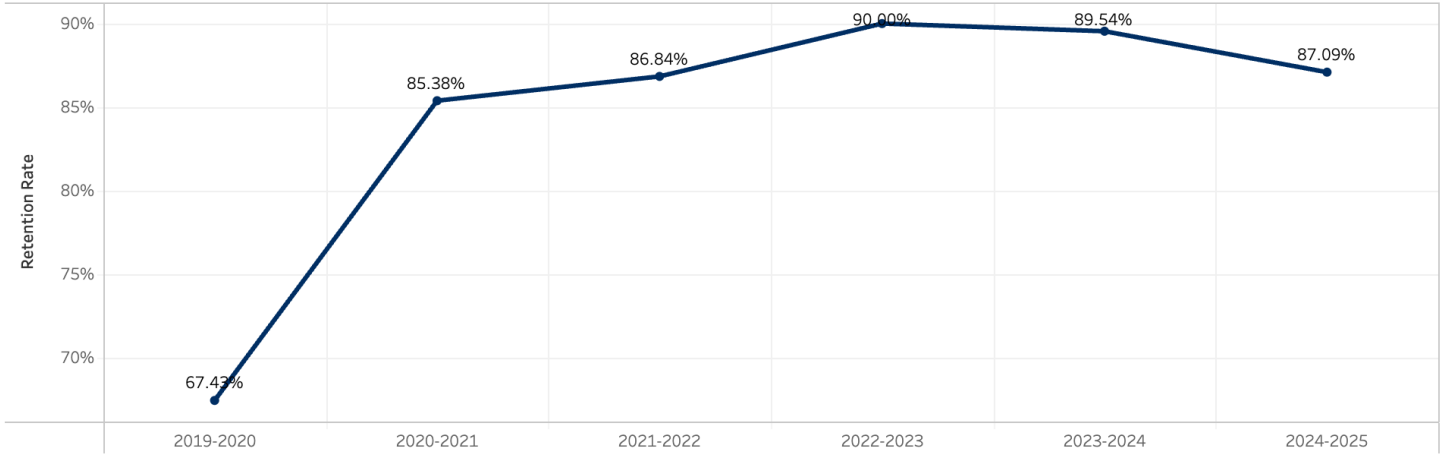
Select Characteristic to Diaggregate: All Students

Select Display: Graph

Graph Legend: All Students in Pr...

Show Statewide 2023-2024 Rate: True

Retention Rates



Population: All students

All students

12.50% 100.00%

Show Annual Plan Question | Show IPR Question | Division: Technology | Department: WMT | Subject: WMT

Division	Department	Subject	Course	Select Student At..	2019-2020 Academic Year	2020-2021 Academic Year	2021-2022 Academic Year	2022-2023 Academic Year	2023-2024 Academic Year	2024-2025 Academic Year
Grand Total					**62.61%**	**77.75%**	**80.47%**	**84.94%**	**83.31%**	**82.90%**
Technology	WMT	WMT	WMT 80	All Students			33.33%			
			WMT 87	All Students			91.30%	97.73%		
			WMT 101	All Students	60.76%	71.15%	69.42%	70.83%	80.69%	75.27%
			WMT 102	All Students	65.45%	84.00%	100.00%	90.63%	83.33%	95.45%
			WMT 102L	All Students	18.18%			61.54%	100.00%	75.00%
			WMT 103	All Students	67.74%	88.24%	90.00%	95.35%	88.64%	96.97%
			WMT 103L	All Students	37.50%			88.89%	70.00%	75.00%
			WMT 107	All Students	78.72%			91.57%	94.00%	88.89%
			WMT 108	All Students	33.33%			76.47%		
			WMT 111L	All Students	38.46%			92.11%	80.77%	72.73%
			WMT 117	All Students		81.40%	100.00%			
			WMT 118	All Students	73.91%		78.79%	84.21%	82.14%	92.19%
			WMT 119L	All Students	46.67%			66.67%	80.00%	
			WMT 123	All Students	80.00%		71.43%		85.29%	84.62%
			WMT 126	All Students						69.23%
			WMT 130	All Students		51.85%	50.00%	42.86%	30.00%	61.54%

Select Success or Course Completion: Success Rate

Population to Display: Cerritos College

Select Characteristic to Diaggregate: All Students

Select Display: Table

Graph Legend

Show Statewide 2023-2024 Rate: True

Show Annual Plan Question | Show IPR Question

Division: Technology | Department: WMT | Subject: WMT

Division	Department	Subject	Course	Select Student At..	2019-2020 Academic Year	2020-2021 Academic Year	2021-2022 Academic Year	2022-2023 Academic Year	2023-2024 Academic Year	2024-2025 Academic Year
			WMT 135	All Students	86.96%		100.00%		78.57%	90.00%
			WMT 144	All Students	59.09%	100.00%		78.57%		85.71%
			WMT 151	All Students	55.77%	86.67%	81.82%	90.70%	78.95%	91.67%
			WMT 153	All Students	60.00%		100.00%	100.00%	76.92%	75.86%
			WMT 154	All Students					90.48%	90.00%
			WMT 155	All Students		100.00%	86.67%		100.00%	86.67%
			WMT 171A	All Students					100.00%	91.67%
			WMT 171B	All Students					100.00%	90.00%
			WMT 171C	All Students					91.67%	100.00%
			WMT 171L	All Students					92.86%	92.31%
			WMT 181	All Students	43.75%		80.00%	90.91%	76.19%	94.44%
			WMT 182	All Students	65.00%		66.67%	93.75%	71.43%	100.00%
			WMT 182L	All Students	100.00%				50.00%	
			WMT 183	All Students	40.00%	80.36%		84.62%	50.00%	56.00%
			WMT 184	All Students		54.17%		100.00%	93.75%	86.67%
			WMT 187	All Students						87.50%
			WMT 201	All Students	85.11%	88.24%	77.78%	77.78%	84.21%	83.33%

Select Success or Course Completion: Success Rate

Population to Display: Cerritos College

Select Characteristic to Diaggregate: All Students

Select Display: Table

Graph Legend

Show Statewide 2023-2024 Rate: True

Show Annual Plan Question | Show IPR Question

Division: Technology | Department: WMT | Subject: WMT

Division	Department	Subject	Course	Select Student At..	2019-2020 Academic Year	2020-2021 Academic Year	2021-2022 Academic Year	2022-2023 Academic Year	2023-2024 Academic Year	2024-2025 Academic Year
			WMT 202	All Students			60.00%	100.00%		62.50%
			WMT 204	All Students				100.00%		
			WMT 205	All Students	100.00%			78.95%		63.64%
			WMT 212	All Students	41.67%					
			WMT 221	All Students		95.00%		100.00%		
			WMT 222	All Students	68.42%					
			WMT 224	All Students	90.00%		71.43%			
			WMT 228L	All Students	85.71%			90.91%	85.71%	61.11%
			WMT 229L	All Students	12.50%				100.00%	81.82%
			WMT 231	All Students			100.00%			86.96%
			WMT 232	All Students			90.91%			
			WMT 233	All Students	14.29%				90.91%	
			WMT 237	All Students			100.00%		100.00%	
			WMT 245	All Students	100.00%		100.00%			90.91%
			WMT 246	All Students				90.00%		
			WMT 249L	All Students	55.56%			100.00%	90.00%	60.00%
			WMT 250	All Students	95.24%		100.00%	100.00%		

Select Success or Course Completion: Success Rate | Population to Display: Cerritos College | Select Characteristic to Diaggregate: All Students | Select Display: Table

Graph Legend

Show Statewide 2023-2024 Rate: True

WMT 250	All Students	95.24%		100.00%	100.00%		
WMT 251	All Students					94.44%	82.35%
WMT 269L	All Students	16.67%			100.00%	71.43%	100.00%
WMT 282	All Students	42.86%		83.33%			100.00%
WMT 291	All Students	100.00%					
WMT 292	All Students			100.00%			100.00%

Select Success or Course Completion: Success Rate | Population to Display: Cerritos College | Select Characteristic to Diaggregate: All Students | Select Display: Table

Graph Legend

Show Statewide 2023-2024 Rate: True

The Woodworking Manufacturing Technologies (WMT) program demonstrates strong and improving student outcomes over the six-year period reviewed. Course success rates increased substantially from approximately 63% in 2019–2020 to the mid-80% range by 2022–2023 and have remained above 82% through 2024–2025, consistently meeting or exceeding statewide benchmarks. Retention rates show a similar positive trajectory, rising from 67% in 2019–2020 to a peak of 90% in 2022–2023 and remaining above 87% in subsequent years. These trends indicate that, as the program recovered from the pandemic and returned to robust in-person instruction, students persisted and completed courses at high and stable rates. It is important to note that a portion of the observed increase in success rates reflects recovery from pandemic-related disruptions rather than a purely linear improvement trend. When compared to pre-pandemic performance, current success rates are consistent with or slightly exceed historical norms.

Disaggregated data indicate that these gains are broadly shared across student populations, with no systemic decline in success or retention among disproportionately impacted groups. Overall program performance suggests that current instructional practices, lab access, and student support structures are effectively promoting persistence and completion as enrollment continues to grow.

At the course level, most WMT offerings demonstrate success rates at or above the program average; however, two courses - WMT 130 (Furniture Design) and WMT 183 (SketchUp for Woodworkers) - have historically exhibited lower success and therefore warrant focused attention as potential barriers to program completion.

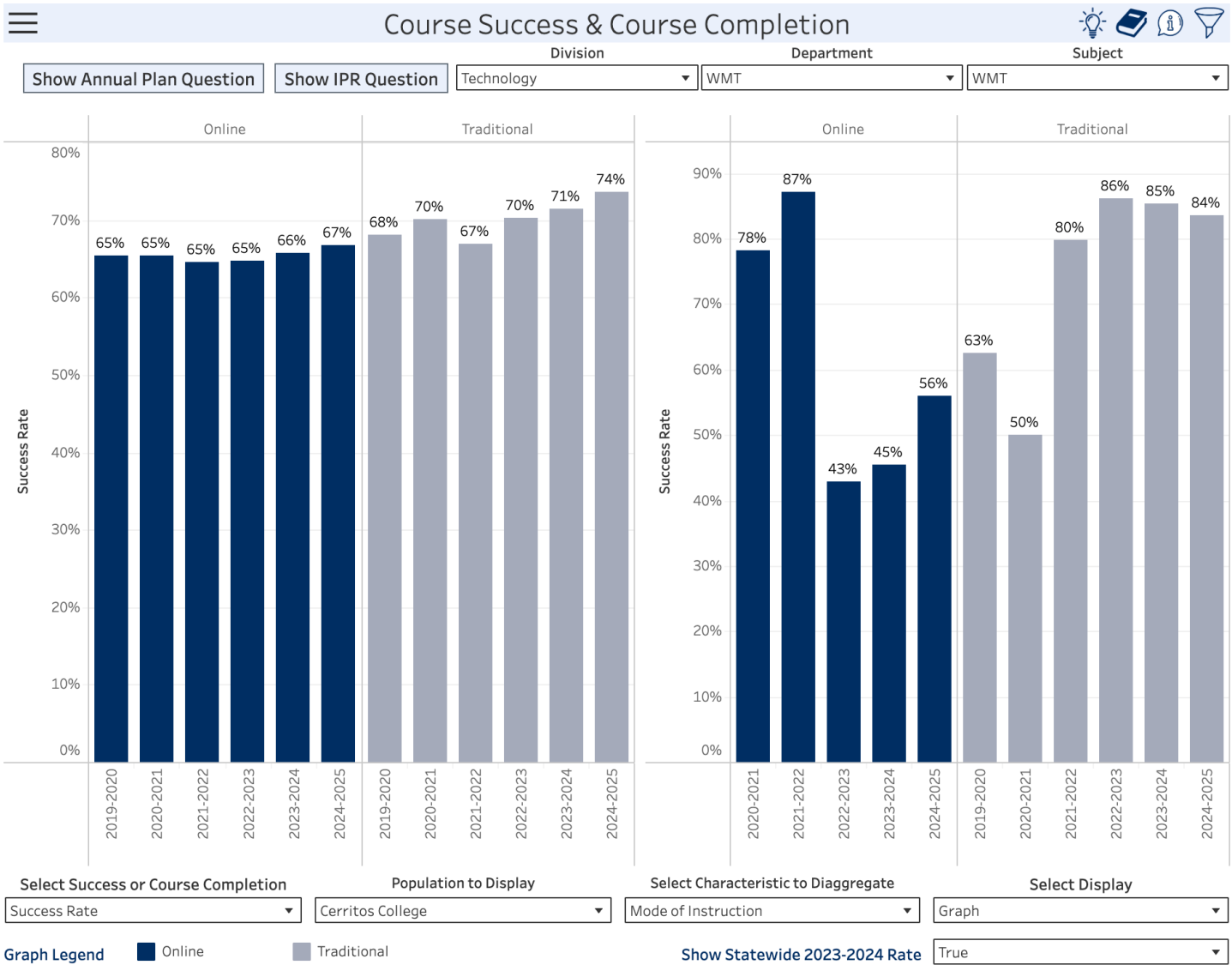
WMT 183 is a computer-based CAD course that has typically been delivered online. Although the content itself does not require physical machine access, the program consistently observes higher levels of engagement and success in face-to-face instruction across the curriculum, including in technology-based courses. In-person delivery allows for immediate feedback, structured studio time, peer interaction, and closer faculty support, all of which are particularly beneficial for students learning new design software. The comparatively lower success rates in WMT 183 therefore appear to be related primarily to modality and engagement rather than content difficulty, reinforcing the program's broader conclusion that in-person instruction is the most effective delivery mode for its student population.

WMT 130, the introductory Furniture Design course, integrates drawing, drafting, and conceptual development with hands-on model making. Historically, this course posed a significant barrier due to the high cost of required materials, which limited access and contributed to lower success rates. Targeted Perkins grant funding to purchase shared instructional supplies and equipment has reduced out-of-pocket expenses and improved access, and recent data show a corresponding upward trend in course success. While success rates remain lower than in many other WMT courses, the improvement suggests that reducing financial barriers has had a positive impact. The department is also actively refining the course to better integrate design and making, scaffold conceptual skills, and calibrate rigor to increase engagement for students whose primary interests initially lie in fabrication rather than design.

Taken together, program-level data indicate strong and improving success and retention, while course-level analysis of WMT 130 and WMT 183 provides targeted insight into how modality, financial access, and instructional design influence student outcomes. These findings continue to guide curricular refinement, delivery-mode decisions, and equity-focused investments aimed at supporting student persistence and timely completion.

4. With regards to success and retention rates, what is the program doing or planning to do to close performance gaps and address student equity? Consider the following question when writing your response:

- ***Are there differences in success rates across delivery method (e.g., face-to-face compared to online)?***



Analysis of success and retention data indicates that performance gaps are most strongly associated with delivery modality and access to resources, with a consistent and measurable gap between face-to-face and online instruction. While overall success rates have improved over time across both modalities, traditional in-person sections demonstrate higher and more stable success rates than online sections. This pattern is evident even in courses that are primarily computer-based, such as CAD and design courses, and is particularly pronounced in foundational and gateway coursework.

The program attributes this difference to the nature of its student population and pedagogy. WMT serves a large proportion of adult learners, first-generation students, and students returning to education after time in the workforce, many of whom benefit from structured class time, immediate instructor feedback, peer interaction, and access to campus resources. In-person delivery supports hands-on demonstration, real-time problem solving, and informal mentoring, all of which contribute to higher engagement and persistence. Online sections, while increasing access and scheduling flexibility, have shown lower levels of sustained participation and completion, contributing to lower success rates for some student groups.

To address these gaps and advance equity, the program is implementing and planning several strategies:

1. **Prioritizing Face-to-Face Instruction.**
   WMT is intentionally limiting the number of online sections and prioritizing in-person delivery for the majority of its courses. Data consistently show higher levels of engagement, persistence, and success in face-to-face environments, and scheduling decisions are being aligned accordingly to ensure that students—particularly those who benefit from structured studio time, immediate feedback, and peer learning—have access to the most effective instructional format.
2. **Reducing Financial Barriers Through Perkins-Funded Instructional Supplies.**
   Perkins funding has been used to purchase shared instructional supplies, reducing out-of-pocket costs for students in foundational and design-oriented courses. Lowering these financial barriers supports equitable access to required materials, increases participation, and contributes to improved course success and persistence for students from disproportionately impacted and economically disadvantaged backgrounds.
3. **Ongoing Data Monitoring and Course-Level Improvement.**
   Full-time faculty regularly review disaggregated success and retention data by delivery method, course, and student population to identify performance gaps and inform targeted instructional and curricular adjustments. This continuous review process ensures that equity considerations remain central to scheduling, modality decisions, and pedagogical refinement.
4. **Use of Embedded Tutors in all Courses.**
   These tutors reinforce instructional content, provide immediate academic support during hands-on activities, assist with troubleshooting and skill development, and serve as additional safety monitors in shop environments. Their presence increases the level of individualized attention students receive, supports timely intervention when students struggle, and enhances both learning outcomes and overall safety, all of which contribute to improved success and retention across student populations. We currently have a pool of 19 embedded tutors that cover the majority of the sections we offer each semester.

These combined strategies align instructional delivery, financial access, academic support, and continuous data-informed improvement with the goal of closing performance gaps and ensuring equitable student success in the WMT program. Collectively, these strategies are designed to reduce structural and access-related barriers, improve student engagement, and ensure more equitable outcomes across all student populations.

5. Discuss conclusions drawn from the program data, assessments (SLOs), and/or other data. Indicate any specific responses or programmatic changes based on the data.
Review of program-level enrollment, success and retention trends, course-level performance, and student learning outcome assessment data indicates that the WMT is experiencing sustained growth, strong student persistence, and generally high levels of instructional effectiveness. Following the pandemic-related decline in 2020-2021, both headcount and enrollment have rebounded steadily and now exceed pre-pandemic levels. At the same time, success rates have stabilized above 80% and retention rates above the high-80% range, demonstrating that increased access and enrollment have not come at the expense of student achievement or course completion.

SLO assessment results and course-level data confirm that students are consistently meeting or exceeding expected learning outcomes in the core technical, design, and safety competencies required for workforce preparation. Faculty review of SLOs across foundational, intermediate, and advanced courses shows alignment between curriculum, industry expectations, and student performance, particularly in hands-on laboratory environments where demonstration, practice, and immediate feedback are central to learning.

Disaggregated data by delivery modality reveal that student success and engagement are strongest in face-to-face sections, even for courses that are primarily computer-based. This finding has led to a programmatic shift toward prioritizing in-person delivery and limiting the number of fully online offerings, particularly for gateway and skills-intensive courses. Scheduling and instructional planning are now intentionally aligned with this evidence to maximize student persistence and completion.

Course-level analysis has also informed targeted responses. For example, lower success rates in design-oriented and technology-mediated courses highlighted the need to reduce financial and instructional barriers. Perkins-funded instructional supplies have been used to lower student costs and increase access to required materials, while curricular refinements are underway to better scaffold conceptual content and integrate design more directly with making. In addition, the use of embedded tutors in lecture and lab environments has been expanded to provide real-time academic support, reinforce instruction, and enhance safety oversight, contributing to improved learning outcomes and student confidence.

Collectively, these data-driven conclusions have resulted in several concrete programmatic actions: prioritization of in-person instruction, strategic use of grant funding to remove equity-related barriers, expansion of embedded academic support, and ongoing curriculum and assessment refinement based on SLO review. These responses demonstrate that the program uses institutional data and assessment results not only for compliance, but as a continuous improvement tool to strengthen student learning, close performance gaps, and ensure that growth in enrollment is matched by sustained excellence in instructional quality and student success.

B. Career Technical Education (CTE) Supplemental Questions : Version by **Loucks, Eric** on **03/25/2026 18:34**

1. How strong is the labor market demand for the program? Utilizing labor market data, describe changes in demand over the last six years and discuss the occupational outlook for the next six years.
Labor market data for the Woodworking Manufacturing Technologies (WMT) program (CIP 48.0703 – Cabinetmaking and Millwork) indicate sustained regional demand and a stable long-term occupational outlook, despite short-term cyclical fluctuations. Lightcast data available for recent reporting periods (2022–2024) for Los Angeles and Orange Counties consistently show demand for core occupations aligned with the program—including Cabinetmakers and Bench Carpenters, Woodworking Machine Operators, and related fabrication and millwork positions. While complete six-year historical data were not available across all reporting periods, the consistency of available multi-year data provides a reliable representation of current and ongoing workforce demand. The most recent data indicate approximately 5,065–5,203 jobs in the region, with an average of over 500 annual openings driven largely by replacement needs as experienced workers retire or transition out of the workforce.

Over the most recent one-year period (2023–2024), total employment across these occupations declined modestly by approximately 2.7%, reflecting broader manufacturing and construction slowdowns; however, hiring activity remains strong. Employers in the region posted 1,409 job advertisements (569 unique postings) between July 2023 and June 2024, with an average of approximately 182 hires per month, indicating that actual hiring continues to outpace online posting activity and that labor demand remains active even in a softening market cycle.

Wages further support the program's workforce relevance. Median hourly earnings across aligned occupations are approximately $19.99 per hour ($41,600 annually), with experienced workers earning between approximately $26 and $35 per hour at the 75th percentile in specialized roles such as cabinetmaking, patternmaking, and model making, demonstrating viable career pathways with opportunities for advancement.

Looking forward, Lightcast data and prior multi-year reports (including 2017–2023 trend data where available) indicate that demand will continue to be driven primarily by replacement openings rather than net new job growth, a common pattern in skilled trades and manufacturing sectors with aging workforces. While some sub-occupations show modest short-term contraction, the volume of annual openings remains significant, and employer demand continues to emphasize technical and hybrid skill sets.

These trends align closely with the WMT program's curriculum and its ongoing emphasis on advanced manufacturing, digital fabrication, and industry-standard design software. The occupational outlook indicates that, although the industry experiences normal economic cycles, the long-term need for skilled woodworkers, cabinetmakers, CNC operators, and fabrication technicians will remain strong in the region, supporting continued program viability, enrollment growth, and the need for sustained investment in instructional staffing and modernized technical training.
2. How does the program address needs that are not met by similar programs in the college's region/service area? Identify and describe any distinctive component of the program and/or unique contributions.

WMT addresses regional workforce and educational needs that are not fully met by other institutions in the college's service area through a combination of depth, specialization, and integration of traditional craftsmanship with contemporary manufacturing and digital design. While some neighboring colleges and private training providers offer limited construction or carpentry coursework, few provide a comprehensive, credit-bearing program focused specifically on fine woodworking, cabinetmaking, furniture design, CNC machining, and digital fabrication within a single, coherent pathway.

A distinctive feature of the WMT program is the integration of design, engineering, and production within one curriculum. Students develop skills in hand tool and machine-based woodworking, CAD, CNC routing, and digital fabrication workflows, allowing them to move fluidly from concept and drawing through prototyping and final production. This design-to-manufacture continuum is uncommon among regional programs, which typically emphasize either construction trades or isolated manufacturing skills without the same level of conceptual and digital integration.

The program also serves a unique population of adult learners, career changers, and small-business entrepreneurs seeking advanced craft and fabrication skills rather than entry-level construction training. Its Furniture Intensive and advanced studio courses provide extended, project-based learning experiences that mirror professional shop practice and boutique manufacturing environments, preparing students for employment in cabinet shops, furniture studios, architectural millwork firms, and self-employment. This focus on high-skill, small-batch, and custom production differentiates the program from larger industrial manufacturing pathways and short-term workforce certificates in the region.

In addition, WMT's emphasis on safety culture, sustainability, and inclusive access represents a distinctive contribution. Purpose-built lab facilities, embedded tutors, close faculty mentorship, and industry-advised curriculum create a learning environment that supports both technical excellence and student persistence, particularly for populations historically underrepresented in the skilled trades.

Through this combination of comprehensive skill development, design-to-production integration, advanced studio practice, and workforce-aligned digital fabrication, the WMT program fills a critical niche in the regional educational landscape and provides a level of specialization and instructional depth that is not widely available through comparable programs in the college's service area.

3. What is the success, completion, and employment rates for students in the program? Identify the standards set by the program for each metric and discuss any factors that may impact the metrics for students in the program. Based on the program's benchmarks, describe the status of any action plans for maintaining/improving the metrics.

Program data and external labor market indicators together demonstrate strong student success, improving completion potential, and favorable employment outcomes for the Woodworking Manufacturing Technologies (WMT) program. Course-level success rates have remained above 80% from 2022–2023 through 2024–2025, following lower performance during the pandemic-impacted years of 2020–2021 and 2021–2022. This Indicates that students who enroll in WMT courses are persisting and completing coursework at high rates. The program's internal benchmark is to maintain success and retention at or above institutional CTE averages, a standard that is currently being met as enrollment continues to grow.

Certificate and degree completion remains modest relative to total enrollment, which is characteristic of applied, skills-based programs serving adult learners and working professionals. Many students enroll to acquire specific competencies for immediate employment or advancement rather than to complete a full credential. In response, the program has recently revised curriculum sequencing, clarified certificate pathways, and expanded intensive and cohort-based offerings to better support student momentum toward completion. These changes represent active efforts to improve completion outcomes, and the program anticipates corresponding increases in certificate and degree attainment in the coming years.

Although individual graduate employment data are not tracked, regional labor market data provide strong evidence of positive employment prospects for students completing WMT coursework. Lightcast reports for cabinetmaking and millwork occupations show sustained regional demand, with approximately 5,200 existing jobs and more than 500 annual openings driven primarily by replacement needs. Median wages approach $42,000 annually, with higher earnings available for experienced workers, indicating viable and sustainable career pathways. Employer hiring activity and ongoing outreach to the department further support the conclusion that WMT students are viewed as workforce ready.

Based on program benchmarks emphasizing strong course success, improving completion, and alignment with stable, in-demand occupations, current outcomes meet or exceed expectations. Ongoing actions, such as prioritizing face-to-face instruction, reducing financial barriers through Perkins-funded instructional supplies, expanding embedded tutoring, and continuously reviewing SLO and labor market data are intended to sustain high levels of student success while improving completion and employment-related outcomes over time.

4. List any licensure/certification exam(s) required for entry into the workforce in the field of study and report the most recent pass rate(s) among program graduates. Identify performance benchmarks set by regulatory agencies and based on the program's benchmarks, describe the status of any action plans for maintaining/improving the pass rates.

There are no state or national licensure or certification exams required for entry into the woodworking, cabinetmaking, furniture, or CNC manufacturing workforce. Unlike some construction and allied trades, employment in this field is based on demonstrated skills and experience rather than regulatory credentialing. As a result, there are no external pass rates or agency benchmarks to report.

In lieu of formal licensure, the WMT relies on industry validation, employer feedback, and student learning outcomes to assess workforce readiness. The program has developed a strong regional reputation, and local employers regularly contact the department to recruit students and graduates for employment, citing their technical proficiency, safety training, design and CNC skills, and overall preparedness for professional shop environments. This sustained employer demand and positive hiring outcomes serve as the primary indicators of program effectiveness and alignment with industry expectations.

Section 3. Instructional Program Learning Outcomes Assessment

A. SLO Assessment Report : Version by **Loucks, Eric** on **01/31/2026 00:04**

Course By SLO	Expected Performance	Performance
WMT180 - Running a Woodworking Business		
Students describe a process for determining and meeting customer needs. (Active from 2013 FA)	100.00%	60.00%
Students describe the financial processes of a woodworking business. (Active from 2013 FA)	100.00%	0.00%
Students describe contract management and subcontracting processes. (Active from 2013 FA)	100.00%	0.00%
Students create a marketing plan for a woodworking business. (Active from 2013 FA)	100.00%	0.00%
Students identify components of a business plan. (Active from 2013 FA)	100.00%	60.00%
WMT187 - Woodworking Machine Maintenance and Repair		

Course By SLO	Expected Performance	Performance
Recognizes various safety hazards and how to reduce the risk of exposure to those risks. (Active from 2021 FA)	100.00%	94.87%
Utilizes the manufacturer's specifications to select proper tools and materials for various maintenance and repair tasks. (Active from 2021 FA)	100.00%	98.72%
Demonstrates their ability to perform woodworking machine maintenance and repair. (Active from 2021 FA)	100.00%	93.59%
Practices troubleshooting common maintenance and repair issues with various woodworking machines. (Active from 2021 FA)	100.00%	96.15%
WMT101 - Introduction to Woodworking		
Students build an assigned project per a drawing and plan of procedure to industry standards. (Active from 2018 FA)	100.00%	89.53%
WMT108 - Wood Carving for Furniture		
Students describe the different types of woodcarving, and the tools and materials used in woodcarving. (Active from 2013 FA)	100.00%	100.00%
Students prepare a carved surface for finishing and apply the appropriate finish. (Active from 2013 FA)	100.00%	92.86%
Carve a Newport shell or similar design. (Active from 2013 FA)	100.00%	85.71%
Carve a well-defined low-relief flower. (Active from 2013 FA)	100.00%	85.71%
Create accurate carved letters. (Active from 2013 FA)	100.00%	0.00%
Utilize the chip carving technique to create geometric patterns. (Active from 2013 FA)	100.00%	0.00%
WMT117 - Woodworking Appreciation		
Students analyze methods of furniture fabrication. (Active from 2013 FA)	100.00%	91.67%
Interpret historical design styles and characterize them by age or cultural location. (Active from 2013 FA)	100.00%	89.58%
Describe economic factors that influence the materials, methods, and style of an article. (Active from 2013 FA)	100.00%	91.67%
Identify the predominate materials used in the production of architecture and furniture. (Active from 2013 FA)	100.00%	85.42%
WMT117 - Woodworking Appreciation		
Differentiate between the materials, methods of fabrication, function, style, and significance of historically and culturally important architecture, furniture, and wooden decorative arts. (Active from 2017 SP)	100.00%	87.50%
WMT118 - Introduction to Woodturning		
Students set up and operate the woodturning lathe to create a spindle project. (Active from 2015 SP)	100.00%	92.00%
Students identify parts of the lathe, turning tools, and turning equipment. (Active from 2013 FA)	100.00%	97.79%
Students select and prepare materials for faceplate or spindle turning. (Active from 2013 FA)	100.00%	95.56%
Students set up and operate the woodturning lathe to create a bowl project. (Active from 2013 FA)	100.00%	92.89%
WMT118 - Introduction to Woodturning		
Students demonstrate the ability to apply a smooth and blemish-free finish to a woodturning project. (Active from 2018 FA)	100.00%	84.21%
WMT126 - History of Furniture Design		
A. Describe, using proper terminology, original and reproduction furniture (Active from 2023 FA)	100.00%	100.00%
B. Demonstrate awareness of the differences between original and reproduction furniture (Active from 2023 FA)	100.00%	100.00%

Course By SLO	Expected Performance	Performance
C. Demonstrate an understanding of the historical precedents informing contemporary furniture design (Active from 2023 FA)	100.00%	100.00%
D. Explain the impacts that historical, political, social, economic, and cultural issues have had on furniture design and function (Active from 2023 FA)	100.00%	100.00%
E. Describe how furniture design trends are shaped by societal issues, market forces, and patterns of exploitation (Active from 2023 FA)	100.00%	100.00%
F. Describe how furniture design intersects with issues of gender, race, ethnicity, disability, social class, and sexual orientation (Active from 2023 FA)	100.00%	100.00%
WMT130 - Furniture Design		
Design a furniture product and prepare a portfolio presentation that includes concept drawings, detailed orthographic and isometric working drawings, and a manufacturing plan. (Active from 2021 FA)	100.00%	63.16%
Create isometric, orthographic, and perspective drawings using drafting tools. (Active from 2021 FA)	100.00%	66.67%
Demonstrate practical knowledge of formal design elements and principles in different furniture forms. (Active from 2021 FA)	100.00%	61.40%
Create scale models of conceptual furniture pieces. (Active from 2021 FA)	100.00%	62.75%
Identify attributes of significant furniture styles. (Active from 2021 FA)	100.00%	50.88%
Prepare and present a design portfolio including concept sketches, scale drawings, and a scale model and/or full-sized drawing of several furniture projects. (Active from 2021 FA)	100.00%	80.85%
WMT130 - Furniture Design		
Students will design a furniture product and prepare a portfolio presentation that includes concept drawings, detailed orthographic and isometric working drawings, and a manufacturing plan. (Active from 2017 SP)	100.00%	73.58%
WMT130 - Furniture Design		
Students proficiently create isometric, orthographic, and perspective drawings using drafting tools. (Active from 2013 FA)	100.00%	73.58%
Students demonstrate practical knowledge of formal design elements and principles in different furniture forms. (Active from 2013 FA)	100.00%	73.58%
Students create scale models of conceptual furniture pieces. (Active from 2013 FA)	100.00%	47.17%
Students identify attributes of significant furniture styles. (Active from 2013 FA)	100.00%	73.58%
Students prepare and present a design portfolio including concept sketches, scale drawings, and a scale model and/or full-sized drawing of a chair, table, and casegood. (Active from 2013 FA)	100.00%	73.58%
WMT135 - Windsor Chair		
Accurately construct the jigs necessary to create a bow-back Windsor Chair (Active from 2019 FA)	100.00%	100.00%
Utilize traditional hand tools to create the parts for a Windsor Chair (Active from 2019 FA)	100.00%	100.00%
Create a Windsor Chair arm and back bow by steam-bending wood (Active from 2019 FA)	100.00%	100.00%
Construct a bow-back Windsor Chair and apply a traditional milk-paint finish (Active from 2019 FA)	100.00%	85.71%
WMT144 - Jigs and Fixtures		

Course By SLO	Expected Performance	Performance
Create a table saw sled or equivalent fixture that fits a particular machine (Active from 2020 SP)	100.00%	89.39%
Understand how to tune-up a table saw, bandsaw, jointer, and planer (Active from 2020 SP)	100.00%	83.33%
WMT151 - Introduction to Faceframe Cabinetmaking		
Operate common woodworking machinery and tools safely. (Active from 2013 FA)	100.00%	93.01%
Create a cut list, bill of materials, plan of procedure, and panel optimization drawing for a cabinet project. (Active from 2013 FA)	100.00%	86.03%
Convert rough lumber to a flat, straight, square-edged piece of a specified size. (Active from 2013 FA)	100.00%	93.38%
Design and build a face frame cabinet with a drawer and a frame-and-panel door. (Active from 2013 FA)	100.00%	83.82%
Install a cabinet door using Euro hinges. (Active from 2013 FA)	100.00%	85.61%
Install a cabinet drawer using drawer runner hardware. (Active from 2013 FA)	100.00%	84.50%
WMT151 - Introduction to Faceframe Cabinetmaking		
Analyze project drawings to identify required parts and part sizes. (Active from 2017 SP)	100.00%	82.22%
WMT153 - Introduction to Frameless Cabinetmaking		
Convert imperial measurements to metric measurements and vice versa. (Active from 2018 FA)	100.00%	84.91%
Design and build a frameless cabinet. (Active from 2018 FA)	100.00%	74.53%
Install a door using Euro hinges. (Active from 2018 FA)	100.00%	78.30%
Construct and install a drawer using drawer runner hardware mounted in line-bored system holes. (Active from 2018 FA)	100.00%	79.25%
Describe and compare the characteristics of different sheet materials used in cabinetmaking. (Active from 2018 FA)	100.00%	84.91%
Describe and compare different materials and processes used for edge banding cabinet parts. (Active from 2018 FA)	100.00%	86.79%
WMT154 - Introduction to Cabinet Installation		
Demonstrate how to safely use cabinet installation tools (Active from 2023 FA)	100.00%	97.30%
Install cabinet doors and drawers (Active from 2023 FA)	100.00%	97.30%
Install a level cabinet base ready to receive a lower cabinet (Active from 2023 FA)	100.00%	100.00%
Install an upper cabinet level and plumb (Active from 2023 FA)	100.00%	97.30%
WMT154 - Introduction to Cabinet Installation		
Install a base cabinet to industry standards (Active from 2017 SP)	100.00%	97.30%
WMT155 - Architectural Millwork		
Design, select, and install base, case, crown, and applied moldings (Active from 2018 FA)	100.00%	81.55%
Create special moldings per a design specification (Active from 2018 FA)	100.00%	85.44%
Demonstrate an understanding of standard residential and commercial framing systems (Active from 2018 FA)	100.00%	70.87%
Install a passage door (Active from 2018 FA)	100.00%	50.49%
Create a coped crown molding joint (Active from 2018 FA)	100.00%	68.93%
WMT181 - Introduction to Cabinet Vision		
Create walls, doors, windows, and pass-throughs for a specific room (Active from 2023 SP)	100.00%	93.67%
Generate cut lists for face frames, carcasses, doors, and drawers (Active from 2023 SP)	100.00%	93.67%
Modify cabinet size and shape (Active from 2023 SP)	100.00%	93.67%

Course By SLO	Expected Performance	Performance
Place a variety of cabinet types in specific locations (Active from 2023 SP)	100.00%	93.67%
Select and modify doors, drawer fronts, and end panels (Active from 2023 SP)	100.00%	93.67%
WMT181 - Introduction to Cabinet Vision		
Create walls, doors, windows, and pass-throughs for a specific room (Active from 2023 FA)	100.00%	0.00%
Place a variety of cabinet types in specific locations (Active from 2023 FA)	100.00%	0.00%
Modify cabinet size and shape (Active from 2023 FA)	100.00%	0.00%
Select and modify doors, drawer fronts, and end panels (Active from 2023 FA)	100.00%	0.00%
Generate cut lists for face frames, carcasses, doors, and drawers (Active from 2023 FA)	100.00%	0.00%
WMT182 - Alphacam and the CNC Router		
Design and execute a three-dimensional wood product. (Active from 2018 FA)	100.00%	92.42%
Produce a full set of CAD/CAM drawings in Alphacam. (Active from 2018 FA)	100.00%	86.96%
Analyze tooling and material properties to evaluate and refine tool paths. (Active from 2018 FA)	100.00%	88.06%
Operate the CNC router; including start-up, homing, tool offset procedures as well as loading tooling and programs. (Active from 2018 FA)	100.00%	90.91%
WMT183 - SketchUp for Woodworkers		
Students will prepare the SketchUp program interface for use in creating woodworking project models (Active from 2019 FA)	100.00%	80.17%
Students will design and model a three-dimensional cabinet project, including all parts and associated joinery (Active from 2019 FA)	100.00%	78.45%
WMT183 - SketchUp for Woodworkers		
Students will create three-dimensional parts with joinery and demonstrate the process of modifying the parts (Active from 2017 SP)	100.00%	77.60%
Students will design and model a three-dimensional table or cabinet project, including all parts and associated joinery (Active from 2018 FA)	100.00%	0.00%
Students will create the planning documents necessary to build a project, including dimensioned drawings, materials, cut lists, and relevant scenes (Active from 2017 SP)	100.00%	70.40%
WMT184 - Introduction to Digital Fabrication		
Describe the history and importance of automated woodworking using CAD/CAM software and the CNC router (Active from 2017 SP)	100.00%	51.28%
Demonstrate a working knowledge of hardware and software systems used in CNC-based woodworking (Active from 2017 SP)	100.00%	69.23%
Create and machine virtually a safety sign project (Active from 2017 SP)	100.00%	69.23%
Create and machine virtually a textured wood panel (Active from 2017 SP)	100.00%	69.23%
Produce a full set of CAD/CAM drawings and CNC code in Rhino3D and RhinoCAM. (Active from 2017 SP)	100.00%	63.24%
Produce numerical control (NC) code for project using CAM software (Active from 2017 SP)	100.00%	69.23%
WMT184 - Introduction to Digital Fabrication		
Set up and safely operate a laser cutter. (Active from 2023 FA)	100.00%	82.76%

Course By SLO	Expected Performance	Performance
Set up and safely operate a CNC router. (Active from 2023 FA)	100.00%	75.86%
Set up and safely operate a 3D printer. (Active from 2023 FA)	100.00%	50.00%
Analyze project results and adjust files and tooling to refine results. (Active from 2023 FA)	100.00%	48.28%
WMT202 - Advanced Furniture Casegoods		
Describe and compare different construction options for a solid-wood casegood project. (Active from 2013 FA)	100.00%	88.89%
Design a casegood project for a given set of requirements and create the necessary planning documents(drawing, bill of materials, and plan of procedure). (Active from 2013 FA)	100.00%	83.33%
Safely and accurately build a casegood project, selecting lumber for the project that complements the aesthetics. (Active from 2013 FA)	100.00%	88.89%
Describe and compare different types of hinges and door installation options used in solid-wood casegood projects. (Active from 2013 FA)	100.00%	77.78%
Prepare the surfaces of a project for finishing and apply the appropriate finish for the intended used of the project. (Active from 2013 FA)	100.00%	88.89%
WMT202 - Advanced Furniture Casegoods		
Students will successfully design and build a solid wood cabinet with a door and a drawer to meet industry standards as specified in this course. (Active from 2017 SP)	100.00%	90.00%
WMT204 - Advanced Tables		
Describe the different table types, along with the ergonomics and design considerations of each. (Active from 2013 FA)	100.00%	100.00%
Describe how wood technology, specifically wood movement, affects table design and construction. (Active from 2013 FA)	100.00%	100.00%
Describe various options for creating expanding tables. (Active from 2013 FA)	100.00%	100.00%
Create the planning documents for the creation of a table to meet specific criteria. (Active from 2013 FA)	100.00%	90.00%
Students describe the joinery commonly used in table construction and the methods used to create the joinery. (Active from 2013 FA)	100.00%	100.00%
Build a table of their own design, incorporating advanced design or building techniques. (Active from 2013 FA)	100.00%	90.00%
Students prepare a table for finishing and apply the appropriate finish. (Active from 2013 FA)	100.00%	80.00%
WMT204 - Advanced Tables		
Students will successfully design and build a table of their own design to industry standards as specified in this course. (Active from 2017 SP)	100.00%	90.00%
WMT205 - Veneering and Marquetry		
A. Students piece together veneer in a specified pattern and attach it to a substrate using the appropriate adhesive and either a caul press or vacuum bag (Active from 2018 FA)	100.00%	88.89%
Select and apply solid wood edge banding to a substrate, before or after veneering the substrate surfaces (Active from 2018 FA)	100.00%	86.11%
Create a four-piece match with veneer and apply filleti and surface banding to the piece (Active from 2018 FA)	100.00%	88.89%
Create a sunburst pattern using at least eight pieces of veneer. (Active from 2018 FA)	100.00%	77.14%
Create parquetry or marquetry patterns, selecting the appropriate veneers for each part (Active from 2018 FA)	100.00%	91.67%

Course By SLO	Expected Performance	Performance
F. Students prepare for and apply a finish to a veneered surface (Active from 2018 FA)	100.00%	94.44%
WMT221 - Advanced Handtools - Handplanes		
Sharpen and set up a handplane to accurately smooth a board with difficult grain. (Active from 2013 FA)	100.00%	100.00%
Build a wooden handplane and adjusting hammer, and set up the plane to smooth the face or edge of a board. (Active from 2013 FA)	100.00%	85.71%
Build and use tooling to accurately square or shape the end of a board. (Active from 2013 FA)	100.00%	97.14%
Students will create a small box with mitered corners, using the tools created in the class. (Active from 2013 FA)	100.00%	100.00%
WMT222 - Advanced Handtools - Joinery		
Students will describe joinery used in furniture construction and how wood technology plays a role in its selection and configuration. (Active from 2013 FA)	100.00%	94.44%
Build a project that incorporates at least three types of joinery, utilizing machine and handtools as appropriate. (Active from 2013 FA)	100.00%	83.33%
Lay out and cut a half lap joint and a mortise and tenon joint with woodworking machinery, using handtools to increase the accuracy of the joinery. (Active from 2013 FA)	100.00%	100.00%
Lay out and cut a half lap joint and a mortise and tenon joint using only hand tools. (Active from 2013 FA)	100.00%	66.67%
WMT224 - Advanced Handtools - Dovetails		
Describe and compare the tools required to create dovetail joinery (Active from 2017 SP)	100.00%	93.10%
Prepare lumber, then lay out, cut, and assemble through, half-blind, houndstooth, and mitered dovetails (Active from 2017 SP)	100.00%	79.31%
Create a jewelry or similar box with hand-cut dovetailed corner joinery (Active from 2017 SP)	100.00%	85.19%
WMT231 - Outdoor Seating		
Students create a full-size drawing of a chair. (Active from 2016 FA)	100.00%	100.00%
Students describe the ergonomics of long- and short-term seating. (Active from 2016 FA)	100.00%	100.00%
Identify wood suitable for outdoor use (Active from 2016 FA)	100.00%	100.00%
Create patterns for machining chair parts, based on a specified drawing (Active from 2016 FA)	100.00%	96.77%
Create mortise-and-tenon and other joinery for an outdoor seating project (Active from 2016 FA)	100.00%	96.77%
Build an outdoor seating project per a specified drawing (Active from 2016 FA)	100.00%	83.87%
Prepare a project for finishing and apply a finish suitable for outdoor use (Active from 2016 FA)	100.00%	100.00%
WMT232 - Chair Design and Construction		
Identify key anatomical characteristics of chair design (Active from 2019 FA)	100.00%	100.00%
Create a full-size drawing of a chair that includes angled joinery (Active from 2019 FA)	100.00%	90.00%
Create patterns and jigs for machining specific chair parts (Active from 2019 FA)	100.00%	100.00%
Build specific joinery for chair making, including angled mortise and tenon joints (Active from 2019 FA)	100.00%	90.00%
Build a chair per specified planning documents (Active from 2019 FA)	100.00%	100.00%
Students will demonstrate the ability to prepare for, select, and apply finish to a chair (Active from 2019 FA)	100.00%	100.00%
WMT233 - Morris Chair		

Course By SLO	Expected Performance	Performance
Students analyze lumber species and grain patterns to select appropriate materials for a Morris chair. (Active from 2013 FA)	100.00%	95.00%
Create joinery required to construct a Morris chair. (Active from 2013 FA)	100.00%	90.00%
Produce a full-scale drawing of a Morris chair. (Active from 2013 FA)	100.00%	95.00%
Identify key design principles of the Arts and Crafts movement as they relate to furniture. (Active from 2013 FA)	100.00%	95.00%
WMT233 - Morris Chair		
Design, construct, and finish a chair based on the original Morris recliner. (Active from 2017 SP)	100.00%	90.00%
WMT237 - Traditional American Furniture		
Students create advanced mortise and tenon joinery. (Active from 2013 FA)	100.00%	100.00%
Students use hand tools to form and shape a furniture project. (Active from 2013 FA)	100.00%	100.00%
Measure existing furniture pieces to create working drawings. (Active from 2013 FA)	100.00%	100.00%
Identify the pros and cons of hand-cut and machine-cut processes in building traditional furniture. (Active from 2013 FA)	100.00%	100.00%
Build a traditional furniture project using hand and power tools. (Active from 2013 FA)	100.00%	100.00%
Analyze and select finishes appropriate to the project. (Active from 2013 FA)	100.00%	100.00%
WMT245 - Curved and Tapered Forms for Furniture		
Calculate tapers and produce appropriate cutting fixtures (Active from 2018 FA)	100.00%	82.35%
Create bending forms using appropriate materials (Active from 2018 FA)	100.00%	79.41%
Produce curved furniture parts using the bent lamination process (Active from 2018 FA)	100.00%	82.35%
Build a piece of furniture incorporating tapered lamination, bent lamination, cove-cut, and/or coopering techniques (Active from 2018 FA)	100.00%	82.35%
E. Students lay out and safely produce cove-cut parts on the table saw (Active from 2018 FA)	100.00%	76.47%
F. Students choose appropriate species and figure type of wood to complement a curvilinear design (Active from 2018 FA)	100.00%	79.41%
WMT246 - Sculptural Chair		
Design a sculptural chair and create a complete set of project drawings (Active from 2018 FA)	100.00%	100.00%
Create a plan of procedure and a bill of materials estimating the chair’s cost (Active from 2018 FA)	100.00%	100.00%
Create the necessary jigs and fixtures for building a sculptural chair (Active from 2018 FA)	100.00%	100.00%
Build a sculptural chair per planning documents (Active from 2018 FA)	100.00%	11.11%
Prepare for and apply the appropriate finish for their sculptural chair (Active from 2018 FA)	100.00%	100.00%
WMT251 - Intermediate Cabinetmaking		
Assemble and install a set of face frame or frameless cabinets (Active from 2023 FA)	100.00%	78.13%
Describe the materials, hardware, and joinery used for cabinetmaking (Active from 2023 FA)	100.00%	75.00%
Demonstrate the installation of moldings and trim for use in face frame or frameless cabinet construction (Active from 2023 FA)	100.00%	71.88%

Course By SLO	Expected Performance	Performance
Describe millwork and cabinetmaking terminology as related to face frame or frameless cabinetmaking (Active from 2023 FA)	100.00%	84.38%
Compare the various certification/construction standards in cabinetmaking. (Active from 2023 FA)	100.00%	71.88%
WMT282 - Intermediate Alphacam and the CNC Router		
Create the planning documents necessary to CNC machine a project, including setup sheets, materials, tool lists, and relevant information. (Active from 2018 FA)	100.00%	70.37%
Design and machine an object made out of hardwood applying toolpaths in Alphacam. (Active from 2018 FA)	100.00%	77.78%
Design and machine a three-dimensional wood product applying toolpaths in Alphacam. (Active from 2018 FA)	100.00%	81.48%
Set up jig and fixtures, home, set tool offsets, load tooling, program and material and operate the CNC router. (Active from 2018 FA)	100.00%	88.89%
WMT291 - Production Cabinetmaking		
A. Students demonstrate appropriate interactions with team members and client to create a cabinet project (Active from 2018 FA)	100.00%	0.00%
Create and assemble parts per production drawings (Active from 2018 FA)	100.00%	0.00%
B. Students research best prices for materials and supplies and locate suppliers from which to purchase items (Active from 2018 FA)	100.00%	0.00%
Install hardware per manufacturer’s specifications (Active from 2018 FA)	100.00%	0.00%
Describe and perform the processes necessary for installation of a multi-piece cabinet project (Active from 2018 FA)	100.00%	0.00%
E. Students maintain current and accurate project records (Active from 2018 FA)	100.00%	0.00%
WMT292 - Production - Special Projects		
A. Students demonstrate appropriate interactions with team members and client to create a cabinet project (Active from 2018 FA)	100.00%	100.00%
Create and assemble parts per production drawings (Active from 2018 FA)	100.00%	100.00%
B. Students research best prices for materials and supplies and locate suppliers from which to purchase items (Active from 2018 FA)	100.00%	100.00%
Install hardware per manufacturer’s specifications (Active from 2018 FA)	100.00%	100.00%
Describe and perform the processes necessary for installation of a specified project (Active from 2018 FA)	100.00%	100.00%
E. Students maintain current and accurate project records (Active from 2018 FA)	100.00%	100.00%
WMT111L - Introduction to Woodworking Lab		
Students mill a rough board to specified dimensions. (Active from 2018 FA)	100.00%	75.00%
Students complete a furniture or accessory project. (Active from 2018 FA)	100.00%	0.00%
Students prepare a project for finishing and apply an oil-varnish blend finish to create a smooth and blemish-free surface. (Active from 2018 FA)	100.00%	75.00%
WMT111L - Introduction to Woodworking Lab		
Students complete a furniture or accessory project (Active from 2019 FA)	100.00%	89.06%
Students prepare a project for finishing and apply an oil-varnish blend finish (Active from 2019 FA)	100.00%	95.00%

Course By SLO	Expected Performance	Performance
Students mill a rough board to specified dimensions (Active from 2019 FA)	100.00%	96.67%
WMT135L - Windsor Chair Lab		
Accurately construct the jigs necessary to create a Windsor chair variant (Active from 2019 FA)	100.00%	100.00%
Utilize traditional hand tools to create the parts for a Windsor chair variant (Active from 2019 FA)	100.00%	100.00%
Create Windsor chair components by steam-bending wood (Active from 2019 FA)	100.00%	100.00%
Construct a Windsor chair variant and apply a traditional milk-paint finish (Active from 2019 FA)	100.00%	100.00%
WMT171A - Introduction to Tables and Woodworking Hand Tools		
Analyze the condition of a chisel, determine the steps necessary to sharpen the edge, and demonstrate the correct procedure (Active from 2023 FA)	100.00%	86.49%
Demonstrate the steps necessary to finish a rough board to specified dimensions using hand planes (Active from 2023 FA)	100.00%	91.67%
Lay out and cut by hand a mortise-and-tenon joint (Active from 2023 FA)	100.00%	80.77%
Lay out and cut by hand a set of through-dovetails (Active from 2023 FA)	100.00%	81.08%
Edge-glue lumber to produce a flat panel (Active from 2023 FA)	100.00%	81.08%
Construct a solid-wood drawer to fit an existing opening (Active from 2023 FA)	100.00%	54.05%
Build a table project to meet the requirements of specified planning documents (Active from 2023 FA)	100.00%	59.46%
WMT171B - Topics in Cabinetmaking		
Analyze project drawings to identify required parts and part sizes (Active from 2023 FA)	100.00%	91.18%
Construct and install a web frame in a casework piece (Active from 2023 FA)	100.00%	94.12%
Create a cut list, bill of materials, plan of procedure, and panel optimization drawing for a cabinet project (Active from 2023 FA)	100.00%	90.91%
Create and install a solid-wood frame and panel door and dovetailed drawer (Active from 2023 FA)	100.00%	81.82%
Build a solid wood casegood project to meet specified requirements (Active from 2023 FA)	100.00%	90.91%
Build a face frame cabinet with a door and drawer to meet specified requirements (Active from 2023 FA)	100.00%	93.75%
Install doors in casework made using different types of hinges (Active from 2023 FA)	100.00%	87.88%
WMT171C - Woodworking Design and Fabrication		
Demonstrate practical knowledge of formal design elements and principles in different furniture forms. (Active from 2023 FA)	100.00%	75.00%
Design a furniture product and prepare a portfolio presentation that includes concept drawings, detailed orthographic and isometric working drawings, and a manufacturing plan. (Active from 2023 FA)	100.00%	70.00%
Prepare and present a design portfolio including concept sketches, scale drawings, and a scale model and/or full-sized drawing of furniture projects. (Active from 2023 FA)	100.00%	75.00%
Demonstrate safe setup and operation of a laser cutter. (Active from 2023 FA)	100.00%	85.00%
Demonstrate safe setup and operation of a CNC router. (Active from 2023 FA)	100.00%	85.00%

Course By SLO	Expected Performance	Performance
Analyze project results and adjust files and tooling to refine results. (Active from 2023 FA)	100.00%	65.00%
Demonstrate safe setup and operation of a 3D printer. (Active from 2023 FA)	100.00%	70.00%
WMT171L - Furniture Intensive Lab		
Safely use all woodworking tools. (Active from 2023 FA)	100.00%	92.31%
Design, build, and complete woodworking projects. (Active from 2023 FA)	100.00%	92.31%
Choose appropriate materials for woodworking projects. (Active from 2023 FA)	100.00%	92.31%
Choose appropriate tools and processes to complete woodworking projects. (Active from 2023 FA)	100.00%	84.62%
WMT182L - CNC Woodworking Lab		
Create the planning documents for a sign, furniture piece, or wood cabinet, with an estimate of the build schedule. (Active from 2018 FA)	100.00%	100.00%
Complete a sign, furniture piece, or wood cabinet per their planning documents. (Active from 2018 FA)	100.00%	100.00%
Evaluate a completed project regarding craftsmanship and aesthetic design. (Active from 2018 FA)	100.00%	100.00%
Students will prepare a project for finishing and apply an appropriate finish on raw wood surfaces, consistently sealing all surfaces with no rough areas. (Active from 2018 FA)	100.00%	100.00%
WMT228L - Project Completion Lab		
Complete a furniture project per the planning documents to industry standards (Active from 2018 FA)	100.00%	81.25%
Evaluate the completed project's overall execution quality and aesthetic design (Active from 2018 FA)	100.00%	80.00%
Prepare a project for finishing and apply the appropriate finish (Active from 2018 FA)	100.00%	75.00%
WMT229L - Comprehensive Woodworking Manufacturing Specialty Lab		
Demonstrate increased competency in woodworking operations. (Active from 2013 FA)	100.00%	75.00%
Identify design elements that affect the comfort and functionality of a project. (Active from 2013 FA)	100.00%	75.00%
Design and construct a woodworking project. (Active from 2013 FA)	100.00%	75.00%
WMT269L - Cabinet Manufacturing Specialty Lab		
Demonstrate increased competency in woodworking operations (Active from 2013 FA)	100.00%	87.10%
Identify design elements that affect the comfort and functionality of a project (Active from 2013 FA)	100.00%	83.87%
Design and construct a woodworking cabinet project (Active from 2013 FA)	100.00%	87.10%
Estimate production and labor costs (Active from 2013 FA)	100.00%	70.97%
WMT101 - Introduction to Woodworking		
Students operate common woodworking machinery and tools safely. (Active from 2013 FA)	100.00%	85.57%
Students calculate board footage. (Active from 2013 FA)	100.00%	88.56%
Students convert rough lumber to a flat, straight and square-edged piece suitable for project use. (Active from 2013 FA)	100.00%	88.63%
Students analyze project drawings to identify required parts and part sizes. (Active from 2013 FA)	100.00%	86.08%
Students prepare for and utilize adhesives to join wooden parts. (Active from 2013 FA)	100.00%	91.14%
Students utilize the appropriate tools and abrasives to smooth wood in preparation for finishing. (Active from 2013 FA)	100.00%	89.39%

Course By SLO	Expected Performance	Performance
WMT102 - Introduction to Solid Wood Casegoods		
Students analyze project drawings to identify required parts and part sizes. (Active from 2013 FA)	100.00%	90.99%
Students construct and install a web frame in a casework piece. (Active from 2013 FA)	100.00%	96.36%
Students create a solid-wood frame and panel door. (Active from 2013 FA)	100.00%	90.52%
Students install a door in a solid-wood casework piece using a pair of butt hinges. (Active from 2013 FA)	100.00%	89.89%
Students create a dado in a solid wood panel using a handheld router. (Active from 2013 FA)	100.00%	94.37%
Students install wood screws correctly using a pilot hole, clearance hole, counter bore and countersink. (Active from 2013 FA)	100.00%	95.15%
Students build a casegood project to meet the requirements of specified planning documents. (Active from 2013 FA)	100.00%	84.48%
WMT103 - Introduction to Tables		
Students convert rough lumber to a flat, straight, square-edged piece of a specified size. (Active from 2013 FA)	100.00%	94.76%
Students analyze project drawings to identify required parts and part sizes. (Active from 2013 FA)	100.00%	92.28%
Students edge-glue lumber to produce a flat panel. (Active from 2013 FA)	100.00%	96.35%
Students construct a mortise-and-tenon joint suitable for leg-and-apron joinery. (Active from 2013 FA)	100.00%	94.06%
Students construct a solid-wood drawer to fit an existing opening. (Active from 2013 FA)	100.00%	79.49%
Students prepare for and apply an oil finish to a table project. (Active from 2013 FA)	100.00%	81.47%
Students build a table project to meet the requirements of specified planning documents. (Active from 2013 FA)	100.00%	88.64%
WMT107 - Wood Finishing		
Change the color of wood with stains, dyes, and chemicals. (Active from 2013 FA)	100.00%	93.25%
Apply a membrane finish with a spray gun. (Active from 2013 FA)	100.00%	89.87%
Apply a membrane finish with a brush. (Active from 2013 FA)	100.00%	93.25%
Select, prepare for, and apply the appropriate finish for a furniture or cabinet project. (Active from 2013 FA)	100.00%	93.67%
WMT123 - Decorative Boxes		
Design and build boxes with mitered and finger-jointed corners. (Active from 2013 FA)	100.00%	92.66%
Describe at least twelve methods to create small boxes. (Active from 2013 FA)	100.00%	91.74%
Students design and build a box with finger-jointed corners. (Active from 2013 FA)	100.00%	91.74%
Design a box to meet a specific object containment need. (Active from 2013 FA)	100.00%	88.99%
Students design and build a box with mortise-and-tenon joinery. (Active from 2013 FA)	100.00%	92.66%
Select and install appropriate box hardware. (Active from 2013 FA)	100.00%	88.99%
Students demonstrate safe operating techniques for machining small parts. (Active from 2013 FA)	100.00%	87.16%
WMT201 - Woodworking with Hand Tools		
Students analyze the condition of a chisel, determine the steps necessary to sharpen the edge, and demonstrate the correct procedure. (Active from 2013 FA)	100.00%	93.67%
Students sharpen and set up a bench plane to plane the face of a board without leaving tracks. (Active from 2013 FA)	100.00%	90.57%

Course By SLO	Expected Performance	Performance
Students sharpen and set up a block plane blade to cleanly cut end grain. (Active from 2013 FA)	100.00%	89.70%
Students demonstrate the steps necessary to finish a rough board to specified dimensions using hand planes. (Active from 2013 FA)	100.00%	73.66%
Students lay out and cut by hand a mortise-and-tenon joint. (Active from 2013 FA)	100.00%	61.01%
Students lay out and cut by hand a set of through-dovetails. (Active from 2013 FA)	100.00%	55.03%
WMT102L - Casegood Manufacturing Lab		
Create the planning documents for a solid wood case with an estimate of the build schedule (Active from 2013 FA)	100.00%	90.00%
Complete a cabinet per their planning documents at a higher level of skill than previous projects (Active from 2013 FA)	100.00%	90.00%
Prepare a project for finishing and apply the finish appropriately (Active from 2013 FA)	100.00%	88.24%
WMT103L - Table Manufacturing Lab		
Prepare a project for finishing and apply the finish appropriately (Active from 2013 FA)	100.00%	100.00%
Complete a table per their planning documents at a higher level of skill than previous projects (Active from 2013 FA)	100.00%	100.00%
Create all the planning documents for a table with an estimate of the build schedule (Active from 2013 FA)	100.00%	100.00%
WMT111L - Introduction to Woodworking Lab		
Students operate common woodworking machinery and tools safely. (Active from 2013 FA)	100.00%	95.31%
Students complete an unfinished project from the WMT 101 class. (Active from 2013 FA)	100.00%	0.00%
Students apply an oil-varnish blend finish, consistently sealing all surfaces with no rough areas. (Active from 2013 FA)	100.00%	0.00%
WMT119L - Introduction to Woodturning Lab		
Select and prepare materials for faceplate or spindle turning (Active from 2013 FA)	100.00%	100.00%
Set up and operate the woodturning lathe to create a bowl or spindle project (Active from 2013 FA)	100.00%	100.00%
Identify parts of the lathe, turning tools, and turning equipment (Active from 2013 FA)	100.00%	100.00%
Prepare for and apply a finish to a woodturning project (Active from 2013 FA)	100.00%	100.00%
WMT249L - Furniture Manufacturing Specialty Lab		
Demonstrate safely and accurately convert rough lumber to a flat, straight, square-edged piece of a specified size. (Active from 2013 FA)	100.00%	92.00%
Create the planning documents for a furniture project with an estimate of the build schedule. (Active from 2013 FA)	100.00%	84.00%
Describe and contrast design elements corresponding to the form and function of a piece. (Active from 2013 FA)	100.00%	84.00%

B. SLO Assessment Analysis : Version by **Loucks, Eric** on **04/27/2026 22:12**

1. Explain the frequency (i.e., when and how often) and content of assessment process (e.g., planning, data collection, and results) for the program (e.g., department meetings, advisory boards, etc.). Also, describe the process for reviewing and discussing outcomes data.

The WMT program conducts course-level SLO assessment on an ongoing basis, with faculty reviewing student learning outcomes each semester as courses are offered. This continuous assessment model allows instructors to evaluate student performance in real time and make incremental instructional adjustments as needed. Changes to the SLOs themselves occur less frequently and are typically made when faculty determine that revisions are necessary to better reflect course objectives or industry practices.

The current assessment record reflects a transition in the program's SLO processes over time. Prior to the establishment of a dedicated SLO coordination structure, some courses were not able to be assessed, resulting in gaps in earlier data. Additionally, the dataset includes legacy SLOs that are no longer active within the current curriculum, which may affect the clarity of longitudinal reporting. Ultimately, we do not believe that this generated data set accurately reflects our program's assessments.

Despite these limitations, the program has implemented more consistent and systematic assessment practices in recent years, ensuring that all active courses are evaluated on a recurring basis. Moving forward, continued refinement of SLO tracking and alignment will further improve the accuracy, consistency, and usefulness of assessment data while maintaining full coverage within the required six-year review cycle.

2. Describe the process for development of plan for improvement and summarize the changes that discipline faculty plan to implement based on the analysis of the student learning and program effectiveness. Provide specific examples.

Taking the example of low award achievement in WMT, we noticed students would skip specific courses. We developed a curriculum plan where students had a prix fixe menu where the courses were laid out in order instead of an ala carte menu of classes. The new courses were written and submitted through the curriculum process. The new courses are equivalent to the ones already offered and then scheduled so students will be more likely to finish their certificates.

Additionally, we are looking at prerequisites and considering how we can encourage students to complete the required coursework for their certificates before they enroll in higher-division electives.

Lastly, we have worked on curriculum to lower the barriers to the completion of our certificates and degrees. This will be implemented in the Fall of 2026.

C. Curricular Course Review : Version by **Loucks, Eric** on **01/31/2026 00:04**

1. Provide the curriculum course review timeline to ensure all courses are reviewed at least once every six years.

The Woodworking Manufacturing Technologies (WMT) program follows a systematic, six-year course review cycle to ensure that all curriculum is evaluated, updated, and aligned with industry standards, student learning outcomes, and institutional priorities. As documented in the 2021–2025 Annual Instructional Unit Plans, course review is coordinated through the department's regular curriculum planning process, advisory committee input, and SLO assessment cycle.

Courses are reviewed on a rotating basis, with priority given to:

- Gateway and high-enrollment courses
- Courses undergoing SLO revision or curriculum modernization
- Courses impacted by equipment upgrades, digital fabrication integration, or changes in industry practice
- Courses supporting new or revised certificates and degree pathways

Each academic year, the department identifies a subset of courses for comprehensive review, including evaluation of course outlines of record, SLO alignment, assessment results, instructional methods, safety requirements, and currency with workforce expectations. Advisory Committee feedback and labor market data are incorporated into this process to ensure continued relevance.

Through this structured rotation, all WMT courses are scheduled for formal review within a six-year cycle, with documentation of updates and approvals routed through the College Curriculum Committee. This process ensures continuous improvement, compliance with accreditation standards, and alignment with evolving industry technologies and student needs.

2. ***Explain any course additions to current course offerings.***

Over the past six years, we added targeted courses to expand depth in key skill areas and respond to student demand for advanced and applied instruction.

WMT 107L - Wood Finish Lab allows students who have completed WMT 107 - Wood Finishing to continue working on subsequent projects and further develop professional finishing skills through extended, hands-on practice.

WMT 203 - Tambour Door is an intermediate casegoods course that introduces a specialized construction technique not previously available in the curriculum, providing students with experience in complex joinery and curved door systems used in custom cabinetry and furniture.

WMT 154 - Cabinet Installation provides hands-on training in the installation of cabinetry, shelving, and related components using a full-scale, framed "doll house" structure that simulates real-world conditions, allowing students to practice layout, fitting, and installation techniques in a controlled instructional environment.

3. Explain any course deletions and inactivation's from current course offerings.

WMT has inactivated select courses to ensure that the published curriculum accurately reflects courses that are regularly offered and supported by qualified instructional faculty.

WMT 180 - Running a Woodworking Business was inactivated due to the absence of appropriately qualified faculty with current professional expertise in small business management within the woodworking industry. While the topic remains valuable, the department determined that it could not be delivered at the level of rigor and industry relevance expected without specialized instructional capacity.

WMT 155 - Architectural Millwork was inactivated after determining that its core learning outcomes could be effectively addressed within existing coursework, particularly WMT 154 – Cabinet Installation, and in response to consistently low enrollment that limited the course's viability as a standalone offering.

Both courses were inactivated rather than permanently deleted to preserve curricular flexibility. The department will consider reactivating these courses should student demand increase and/or appropriately qualified faculty become available, ensuring that the program's course inventory remains current, relevant, and aligned with instructional capacity and workforce needs.

4. Discuss how well the courses, degrees, and/or certificates meet students' transfer or career training needs. Consider the following questions:

- ***Have all courses that are required for the program's degrees and certificates been offered during the last two years? If not, has the program established a course offering cycle?***
- ***How has degree and/or certificate completion changed over time?***
- ***Are there sufficient completers compared with the size of your program?***

WMT's courses, degrees, and certificates are designed to prepare students for immediate employment in woodworking, cabinetmaking, furniture production, CNC machining, and related manufacturing fields, while also supporting transfer and continued education in design and applied arts where appropriate. Curriculum is developed and regularly reviewed in consultation with the Advisory Committee and aligned with regional labor market demand to ensure relevance and workforce applicability.

All core courses required for the program's active degrees and certificates have been offered within the last two academic years, and the department maintains a planned course rotation to ensure students can complete required sequences in a timely manner. Gateway and high-enrollment courses are scheduled annually, while advanced and specialized courses are offered on a predictable cycle based on demand, faculty availability, and facility capacity.

Degree and certificate completion has increased as enrollment and retention have rebounded since 2021-2022; however, the total number of completors remains somewhat lower than desired relative to overall program size. This is common in skills-based CTE programs where many students enroll for targeted workforce preparation rather than formal credential completion.

In response, the department has restructured course sequencing, clarified certificate pathways, and expanded intensive and cohort-based offerings to better support momentum toward

completion. These curriculum changes are intended to reduce bottlenecks, improve advising clarity, and encourage students to persist through full certificate and degree pathways, and the program anticipates corresponding increases in completion rates in the coming years.

5. ***Are any licensure/certification exams required for program completion or career entry?***

- ***If so, what is the pass rate among graduates?***
- ***Set an attainable, measurable goal for pass rates and identify any applicable performance benchmarks set by regulatory agencies.***

There are no state or national licensure or certification examinations required for completion of our programs or for entry into the associated occupations. Employment in woodworking, cabinetmaking, furniture making, CNC operation, and related fabrication fields is based on demonstrated technical skill, portfolio quality, and workplace experience rather than regulatory credentialing. As a result, there are no external pass rates, regulatory benchmarks, or licensure-based performance targets applicable to the program.

Section 4. Instructional Program Reflection

A. Six-Year Program Reflection : Version by **Loucks, Eric** on **03/25/2026 18:34**

1. Provide an analysis of your program throughout the last six years, reflecting on student demographics and enrollment. Reflect on any changes you would like to see in your program in the next six years.

Over the past six years, the Woodworking Manufacturing Technologies department has experienced significant change in both enrollment and student demographics, shaped by broader economic conditions, the COVID-19 pandemic, and subsequent recovery and growth. Following a pandemic-related decline in 2020-2021, enrollment rebounded steadily and now exceeds pre-pandemic levels, demonstrating sustained student demand and the program's continued relevance within the college's service area. Throughout this period, the program has maintained strong success and retention rates, indicating that growth has not come at the expense of student outcomes.

Demographically, the program continues to serve a diverse student population, with gradual increases in female participation and representation among historically underrepresented racial and ethnic groups. While the field remains male-dominated, recent trends indicate incremental progress toward greater gender diversity, aligning with the department's emphasis on inclusive learning environments and outreach. Continued diversification of the student population remains a priority, particularly as the program grows and evolves.

Age demographics have remained relatively stable over the review period, with a majority of students identifying as adult learners, career changers, or working professionals. This profile reflects the program's role as a workforce-focused, skills-based pathway. Looking ahead, the department seeks to increase participation among nontraditional and younger students, particularly those closer in age to the broader Cerritos College population, in order to strengthen early career pathways and long-term educational momentum.

Over the next six years, the program aims to build on current strengths while intentionally expanding access and visibility. Planned efforts include increased outreach and recruitment through advertising in *Wings* Magazine, the use of lawn signage for improved campus-based visibility, as well as a stronger presence at campus and community events. These efforts are intended to broaden awareness of woodworking and manufacturing careers, attract a more age-diverse and representative student population, and continue increasing participation among women and students from historically underrepresented groups.

Collectively, these strategies reflect the program's commitment to sustained growth, equity, and alignment with the College's mission, while positioning WMT to better reflect the demographics of the campus community and regional workforce over the next six years.

Goals for our next Program Review Cycle:

Goal	Objective	Action Summary	Timeline	Person(s) Assigned
Curriculum & Instruction	Strengthen and expand curriculum to support advanced skill development and program engagement	Conduct ongoing refinement of the intensive furniture making program; expand curriculum offerings including specialized pathways (e.g., guitar making); integrate advanced techniques and project-based learning; improve program marketing to support participation	Ongoing	Eric Loucks, Reuben Foat
Curriculum & Instruction	Standardize and enhance instructional materials and course design	Develop Open Educational Resources (OER) for foundational courses (WMT 100/101); assess course effectiveness across sections; create standardized outlines, instructional materials, and project documentation to improve consistency and student outcomes	Fall 2028	Reuben Foat
Student Equity & Success	Reduce barriers to entry and improve student persistence and completion	Regularly assess Core Indicators; utilize Perkins and Strong Workforce funding to provide materials and reduce cost barriers; improve access and support for students in high-cost courses	Ongoing	Reuben Foat, Anthony Fortner, Eric Loucks
Student Equity & Success	Expand financial and structural support systems to improve retention and outcomes	Develop and expand scholarship programs; coordinate with Foundation; align financial support with recruitment, retention, and completion goals	Spring 2029	Reuben Foat, Anthony Fortner, Eric Loucks
Program Growth	Increase enrollment, degree/certificate completion, and overall program participation	Expand marketing efforts; refine curriculum and scheduling to support completion; identify and support near-completers; improve program visibility across the region	Ongoing	Eric Loucks, Reuben Foat
Program Growth	Strengthen workforce outcomes through employer engagement and job placement	Build and maintain employer partnerships; develop workforce pipelines; connect students to employment, internships, and apprenticeships; implement job placement tracking and alignment with program outcomes	Spring 2028 & Ongoing	Eric Loucks, Reuben Foat
Technology & Digital Fabrication	Expand and institutionalize digital fabrication and advanced manufacturing curriculum	Develop Digital Fabrication Certificate/Degree; implement new courses (WMT 224, WMT 284); integrate CNC and digital workflows into curriculum; pursue grant funding to maintain current technology	Fall 2029	Eric Loucks, Reuben Foat
Technology & Digital Fabrication	Integrate emerging technologies into instructional practices	Attend training and professional development; incorporate AI tools into design, manufacturing, and production workflows where appropriate	Fall 2029	Eric Loucks, Reuben Foat
Equipment & Facilities	Support long-term program development through facilities planning and infrastructure alignment	Participate in institutional planning processes for future WMT facilities; provide program data related to space, equipment, and infrastructure needs	Dependent on College construction cycle (2031)	Reuben Foat, Anthony Fortner, Eric Loucks
Equipment & Facilities	Maintain and modernize equipment to align with industry standards and instructional needs	Submit equipment requests through Unit Plans; maintain and replace high-use equipment; align purchases with workforce needs and technological advancement	Annual	Reuben Foat, Anthony Fortner, Eric Loucks

2. What is the six-year trend of degrees and certificates awarded? Is there anything you can do to help increase the number of students who acquire degrees and/or transfer?

Over the past six years, the number of degrees and certificates awarded in the department has shown a generally increasing trend, particularly as enrollment recovered and expanded following the pandemic. Growth in awards has tracked closely with improvements in student success and retention, as well as increased access to required coursework and clearer program pathways.

While the upward trend is positive, the program recognizes that the number of completers remains modest relative to overall enrollment. This is partly attributable to the workforce-oriented nature of the program. Many students enroll to gain targeted technical skills for immediate employment, advancement, or self-employment and may already hold prior degrees or credentials, reducing the likelihood of transfer or formal degree completion.

To support increased certificate and degree attainment, the program has implemented several intentional changes. Certificate and degree unit counts have been reduced where appropriate to lower structural barriers and allow students to complete credentials more efficiently. Course sequencing has been clarified, and intensive program formats have been expanded to provide cohort-based momentum and clearer completion timelines. These changes are designed to better accommodate working adults while encouraging persistence through full credential pathways.

Although transfer is not a primary goal for most WMT students, the program has expanded transfer-aligned options for those who choose to pursue further education. The recent addition of WMT 126 - History of Furniture Design, a UC/CSU-transferable course, provides students with an opportunity to earn transferable academic credit while deepening their understanding of design history and theory. This course strengthens transfer readiness without shifting the program's primary workforce focus. Overall, the program anticipates that recent curriculum revisions, reduced unit requirements, expanded intensive offerings, and the addition of transferable coursework will result in continued growth in degrees and certificates awarded over the next six years.

3. Were there any unplanned events (positive or negative) that affected your program? If so, what were they and how did they affect the program?

Yes, the COVID-19 pandemic was a significant unplanned event that affected our program. During the height of the pandemic, enrollment declined sharply due to the hands-on, lab-intensive nature of the curriculum, reduced access to shop facilities, and limitations on in-person instruction. Course offerings, shop utilization, and student engagement were all temporarily constrained during this period.

Following the return to in-person instruction, the program experienced a strong and sustained rebound. Enrollment recovered steadily and has now surpassed pre-pandemic levels, confirming continued student demand for hands-on, workforce-focused training. This recovery demonstrated both the resilience of the program and the importance of face-to-face instruction for student engagement and success.

The pandemic also provided valuable perspective that has informed the program's long-term planning. It reinforced the need to prioritize in-person delivery, maintain flexible yet sustainable scheduling, and design curriculum that balances access with instructional effectiveness. The subsequent enrollment growth and increased instructional demands contributed directly to the college's approval to initiate a search for a fourth full-time faculty member, marking a significant milestone in the program's development and capacity.

4. Please describe any recent achievements in your program by faculty and staff who have won awards or distinctions, new projects your program has implemented, committee work, professional development work, conference presentations, community engagement, or recently published work.

Over the past several years, WMT faculty and staff have achieved significant accomplishments that reflect sustained growth, instructional innovation, and strong alignment with workforce and institutional priorities.

One of the program's most notable achievements has been the creation and implementation of the intensive, full-time furniture making program, which provides students with a cohort-based, immersive learning experience that closely mirrors professional shop practice. This model has strengthened student engagement, improved momentum toward completion, and expanded access for students seeking accelerated, high-skill training. Students enrolled in the intensive program receive a comprehensive scholarship covering program costs, fees, and required materials through the John B. Smith Scholarship Fund, an endowment dedicated to supporting woodworking students. This financial support has been critical in reducing barriers to participation and advancing equitable access. The success of the intensive format has also informed broader curriculum planning and contributed to sustained enrollment growth.

Faculty have led ongoing curriculum expansion and refinement to address gaps in advanced technique instruction, improve alignment with industry workflows, and support both workforce preparation and transfer-aligned learning. Certificate and degree pathways have been streamlined to reduce unit counts and lower structural barriers to completion while maintaining instructional rigor.

The program has implemented several instructional improvement initiatives supported by external funding, including the use of Perkins Grant resources to provide shared instructional supplies that reduce student costs and improve equitable access. Faculty have also integrated updated technologies and digital fabrication workflows to ensure instruction remains current with industry expectations.

In addition, WMT faculty and staff have maintained strong engagement in college service, advisory collaboration, and professional development, contributing to curriculum review, safety and facilities planning, and ongoing alignment with the Students First Framework. Collectively, these efforts demonstrate sustained faculty leadership, responsible program stewardship, and a commitment to continuous improvement in support of student learning, workforce preparation, and long-term program vitality.

5. Provide a status update on goals from the last program review cycle.

Program Goal	Original Action Summary	Target Timeframe	Person(s) Assigned	Current Status
Create a scholarship to encourage high school woodworking students to continue at WMT (Next Gen Woodworking Scholarship)	Earmark Smith Memorial funds; coordinate with Foundation; develop application and outreach to high schools	Spring 2021	Reuben Foat, Anthony Fortner	In Progress
Create a scholarship to encourage completion of the Cabinetmaking certificate/degree	Allocate Smith Memorial funds; develop application; notify students	Spring 2021	Reuben Foat, Anthony Fortner	Completed
Create a scholarship to encourage completion of the Furniture Making certificate/degree	Allocate funds; develop application; notify students	Spring 2023	Reuben Foat, Anthony Fortner	Evolved
Create a scholarship for students pursuing woodworking education and teaching (Smith Woodworking Scholars)	Allocate funds; coordinate with Teacher TRAC; develop application and criteria	Spring 2021	Reuben Foat, Anthony Fortner	No longer active
Create a scholarship for students studying woodworking at other institutions (Ambassador Scholarship)	Allocate funds; develop application; notify students	Spring 2021	Reuben Foat, Anthony Fortner	completed
Create a merit-based scholarship for students completing certificates/degrees	Allocate funds; develop application; notify students	Spring 2021	Reuben Foat, Anthony Fortner	In Progress
Hire a full-time cabinetmaking instructor	Submit hiring justification; collect workforce demand data	Ongoing until hire	Reuben Foat, Anthony Fortner	Completed
Increase program awards from approximately 10 to at least 50 annually	Identify near-completers; outreach; curriculum adjustments	May 2023 & ongoing	Reuben Foat, Anthony Fortner	In Progress
Increase WMT operating budget to $20,000 annually	Track budget needs; document shortfalls; submit annual requests	Annual	Reuben Foat	Completed
Increase job placements to at least six per year	Build employer database; connect students with job opportunities	May 2022	Reuben Foat	Completed/Ongoing

Develop and post instructional videos for core WMT courses	Record procedures; caption; publish instructional content	Fall 2022	Reuben Foat	No longer active
Install functional projectors and screens in all woodworking classrooms	Obtain quotes; submit funding requests; install if approved	Fall 2022 & ongoing	Reuben Foat	Completed
Upgrade WD-1 to Smart Classroom standards	Research best practices; obtain quotes; submit funding requests	Fall 2022 & ongoing	Reuben Foat	Completed
Improve depth and consistency of instruction across WMT courses	Standardize materials; improve coordination among faculty	Spring 2023	Reuben Foat, Anthony Fortner	Completed/Ongoing
Create an intensive one-year Cabinetmaking certificate pathway	Develop curriculum; assign full-time faculty lead	Fall 2023	Reuben Foat	No longer active
Create an intensive one-year Furniture Making certificate pathway	Develop curriculum aligned with existing courses	Fall 2025	Reuben Foat	Completed
Upgrade equipment regularly to align with industry trends	Submit equipment requests through Unit Plans	Annual	Reuben Foat	Completed/Ongoing
Increase success rates for Black/African American and Hispanic/Latino students	Identify barriers; adjust instruction and support structures	Spring 2023	Reuben Foat, Anthony Fortner	Completed/Ongoing

Since the last program review cycle, the WMT program has made substantial progress on its stated goals, with many actions completed and others evolving to better align with student needs and institutional capacity. Key priorities—including hiring a full-time cabinetmaking instructor, increasing the operating budget to $20,000 annually, upgrading classrooms to Smart Classroom standards, installing functional projectors across woodworking spaces, expanding job placement efforts, and regularly upgrading equipment—have been successfully achieved.

Student success and completion have improved through increased awards, standardized instructional materials, and the completion of an intensive one-year Furniture Making certificate pathway. While some initiatives (such as instructional video development and certain intensive certificate pathways) were discontinued or restructured, these changes reflect strategic recalibration rather than lack of progress.

Scholarship development remains a major area of success and growth. Since Fall 2020, approximately $205,000 has been awarded across cabinetmaking, intensive cohort, and ambassador scholarships over multiple years, significantly supporting retention, completion, and workforce preparation. With approximately $88,000 available annually, the program is well positioned to further expand scholarships as a strategic tool to incentivize student success, persistence, and job attainment.

Overall, the majority of goals from the prior program review have been completed or are ongoing, demonstrating sustained progress, responsible stewardship of resources, and continuous improvement aligned with workforce and equity priorities.

6. If applicable, describe the resources the program received from the last review cycle and the impact it had on the program?

Over the past six years, WMT has strategically leveraged external funding to expand instructional capacity, modernize shop infrastructure, and strengthen student learning outcomes across the curriculum.

Strong Workforce funding (SWF) has provided approximately **$569,000** in program-specific support and has enabled substantial investments in shop-wide machinery and instructional technology used across all WMT courses and programs. These investments include major production equipment and digital fabrication tools that expand student access to industry-standard processes and workflows. By modernizing shared instructional spaces rather than limiting resources to a single pathway, SWF investments have improved instructional efficiency, increased hands-on learning opportunities, and ensured that students across all program tracks train in environments that reflect current workforce expectations.

Perkins funding, totaling approximately **$78,000** over the review period, has been used to strengthen Core Indicators related to access, success, and completion. Perkins resources have supported shared instructional tools, starter kits, supplies, and safety-related materials that improve foundational skill development and reduce instructional barriers in high-impact courses. These investments allow faculty to scaffold instruction more effectively, improve consistency in student preparation, and support equitable participation for students who may otherwise face financial or access-related challenges.

Together, these external funding sources have allowed the program to address both instructional capacity and student success in a coordinated and intentional manner. Strong Workforce investments have focused on long-term infrastructure and instructional modernization, while Perkins funding has targeted student access and core performance outcomes. This combined approach has contributed to sustained enrollment growth, strong success and retention rates, and continued alignment with regional workforce needs.

Section 5. Instructional Program Goals and Resource Requests

A. Six-Year Program Goals and Resource Requests