

Outcomes Assessment

Student Learning Outcomes and Degree Program Objectives



CAL POLY

Construction Management

COLLEGE OF ARCHITECTURE
& ENVIRONMENTAL DESIGN

PLO# 10. Understand different methods of project delivery and the roles and responsibilities of all constituencies involved in the design and construction process.*

Assessment Measure Summary Results

Assessment Measure 1: Exam		GOAL NOT MET
Type:	Direct Measure	
Course & Assignment:	CM 450 (Integrated Project); Exam	
Goal:	80% of student get 80% or higher	
Date(s) of OAM reviews:	June 2025 (for AY 2024-2025) June 2026 (for AY 2025-2026)	
Results:	61% of students achieved 80% or higher in AY 2024-2025 69% of students achieved 80% or higher in AY 2025-2026	
Revisions made to instrument:	Exam developed in June 2024, implemented in AY 2024-2025	
Actions Taken and Results:	At the mid-year review, it was discovered that students had not been completing the assignment so evaluation was not completed. A team of faculty members developed a project delivery methods exam, tested in in Fall 2024, and implemented it in Winter 2025. To prevent this from happening again, faculty will receive continuous training and reminders during department meetings on how to collect data for outcomes assessment and will share best practices for collecting and sharing data to avoid future gaps. A shared file has been created to easily identify when data has been collected so data collection can happen timely. Results are now recorded more consistently (starting Fall 2025).	
Recommendations for Improvement:	Implement assessment instrument in CM 1102 class to emphasize importance of project delivery methods; continue identifying ways to discuss project delivery methods throughout the curriculum	

Assessment Measure 2: Survey – Graduating Seniors		GOAL PARTIALLY MET
Type:	Indirect Measure	
Goal:	80% of students rate their ability as good and above.	
Dates of OAM reviews:	June 2021 (for AY 2020-2021); June 2024 (for AY 2023-2024); June 2025 (for AY 2024-2025); June 2026 (for AY 2025-26)	
Results:	June 2021: 96% of students rated abilities as good or above (n=52) June 2024: 88% of students rated abilities as good or above (n=59) June 2025: 78% of students rated abilities as good or above (n=9) June 2026: 95% of students rated abilities as good or above (n=20)	
Actions Taken:	Student-led senior projects collected qualitative data using focus groups to get additional insights (June 2024 and June 2025).	

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PLO 10:Project Delivery Methods

Date of Report: July 2026

**Previously PLO Number 12. The number was adjusted when original PLOs 7 (documents), 9 (multi-disciplinary skills), and 13 (risk management) were removed from the original required PLO assessment measures.*

As prescribed in Section 8.5.1 and 9.4.1 of ACCE Document 103, Standards and Criteria for the Accreditation of Construction Education Programs

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Recommendations for Improvement:	Work with ASCM student club to increase response rates.
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Assessment Measure 3: Survey – Industry Employer		GOAL MET
Type:	Indirect Measure	
Goal:	50% of employers rate students' abilities as good and above.	
Dates of OAM reviews:	June 2021 (for AY 2020-21); June 2024 (for AY 2023-2024); June 2026 (for AY 2025-5026)	
Results:	June 2021: 86% of employers rated abilities as good or above (n=21) June 2024: 75% of employers rated abilities as good or above (n=23) June 2026: 86% of employers rated abilities as good or above (n=30)	
Actions Taken:	Advertising survey at annual CMAC meeting to increase response rate	
Recommendations for improvement:	Survey lacks consistent responses; work with CMAC Committee to determine ways to increase response rates.	

Assessment Measure 4: AIC Exam		GOAL MET
Type:	Indirect Measure	
Goal:	The department's performance is better than the national average.	
Dates of OAM review:	Fall 2021, Spring 2022, Fall 2022, Spring 2023, Fall 2023, Spring 2024, Fall 2024, Spring 2025, Fall 2025, Spring 2026	
Results:	100% of students outperformed the national average on each exam (Fall 2021, Spring 2022, Fall 2022, Spring 2023, Fall 2023, Spring 2024, Fall 2024, Spring 2025, Fall 2025, Spring 2026).	
Actions Taken:	None	
Recommendations for Improvement:	None	

Method of Assessment:

Actions taken:

Direct Assessment Measure:

The direct assessment tool in CM 450 (Integrated Project, Design and Program Management) was changed from an individual assignment with a rubric to the AIC exam in Fall 2022. This change was made while the course champion was retired, and the AIC exam was considered adequate for measuring student learning outcomes until a new course champion was hired. Now that a new course champion has been identified, an assessment measure has been embedded in the course again. In the academic year 2024-2025, a new assessment measure was created and tested to evaluate student performance.

Discussion:

Students are not understanding the differences between delivery methods, although the curriculum map shows exposure to delivery methods throughout the curriculum. To improve the effectiveness of

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teaching delivery methods, incorporate reading assignments and short lectures with interactive team-based activities. Feedback indicates a preference for collaborative and participatory learning approaches.

Recommendations for Improvement:

To improve the effectiveness of teaching delivery methods, incorporate reading assignments and short lectures with interactive team-based activities. Feedback indicates a preference for collaborative and participatory learning approaches. It is recommended to design activities that foster teamwork and engagement, complemented by concise readings and brief lectures to enhance understanding and achieve stronger learning outcomes.

With the semester conversion, incorporating this assessment into a course earlier in the curriculum (CM 1102 class) may help emphasize importance of project delivery methods, and can understand shortfalls that can then be implemented later in the curriculum.

Additional Data for Outcomes Assessment Measures:

Assessment Measure 1: Exam with Rubric

Quarter	Number of CM students who completed the quiz/exam	Total number of CM students with 80% or better on the quiz/exam	Percent of students with 80% or more
Winter 2025	26	18	69%
Spring 2025	20	13	65%
Spring 2025	20	9	45%
Fall 2025	18	11	61%
Winter 2026	14	10	71%
Spring 2026	23	18	78%
Spring 2026	25	16	64%

Assessment Measure 2: Survey – Graduating Seniors

Rating	2020-2021	2023-2024	2024-2025	2025-2026
Poor	0	0	1	0
Fair	2	7	1	1
Good	23	16	5	6
Very Good	19	19	1	8
Excellent	8	17	1	5
Total Responses	52	59	9	20
Total - Good or Better	50	52	7	19
Percentage - Good or Better	96%	88%	78%	95%

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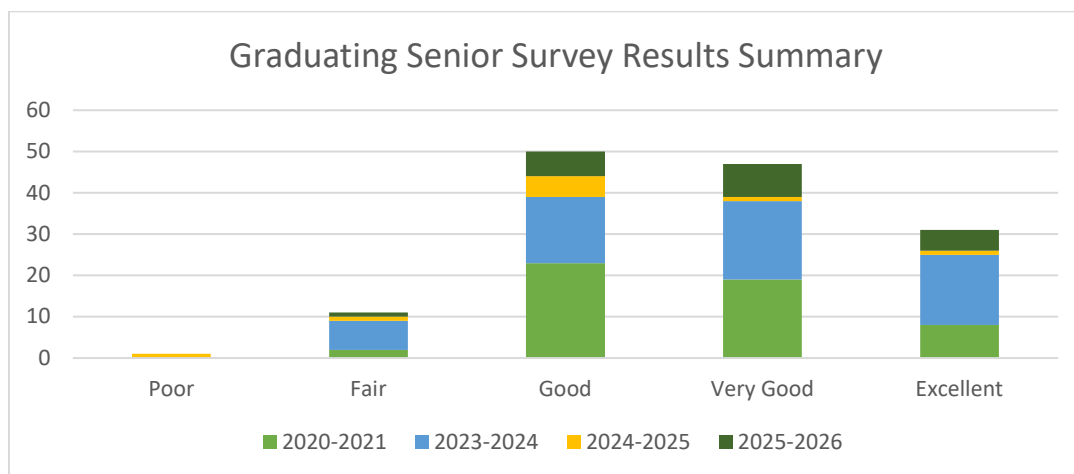
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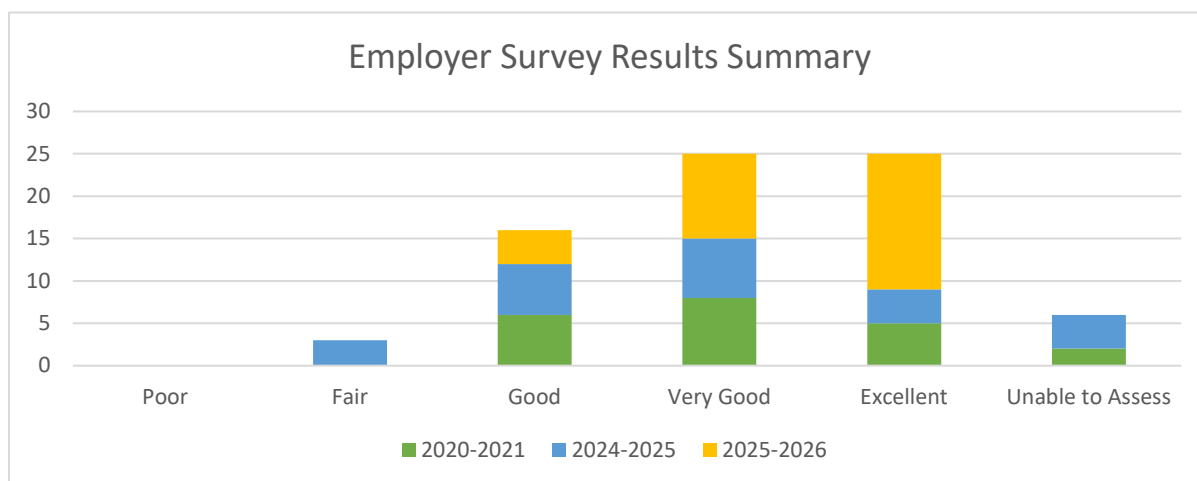
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Assessment Measure 3: Survey – Industry Employers

Rating	2020-2021	2024-2025	2025-2026
Poor	0	0	1
Fair	3	5	3
Good	6	9	4
Very Good	10	3	8
Excellent	2	3	12
Unable to Assess	0	3	2
Total Responses	21	23	30
Total - Good or Better	18	15	24
Percentage - Good or Better <i>(excludes unable to assess responses)</i>	86%	75%	86%



Assessment Measure 4: AIC Exam Results Summary:

AIC Exam Results - PLO No.10

	Fall 2021	Spring 2022	Fall 2022	Spring 2023	Fall 2023	Spring 2024	Fall 2024	Spring 2025	Fall 2025	Spring 2026
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School Average	75%	78%	81%	79%	78%	73%	78%	84%	84%	89%
National Average	68%	70%	71%	67%	66%	62%	62%	64%	67%	73%

