

Outcomes Assessment

Student Learning Outcomes and Degree Program Objectives



CAL POLY

Construction Management

COLLEGE OF ARCHITECTURE
& ENVIRONMENTAL DESIGN

PLO# 15. Understand the basic principles of sustainable construction.*

Assessment Measure Summary Results

Assessment Measure 1: Final Exam		MEETS TARGET
Type:	Direct Measure	
Course & Assignment:	CM 317 (Sustainability and the Built Environment); final exam	
Goal:	80% of students achieve 80% or better	
Date(s) of OAM reviews:	June 2021 (for AY 2020-2021) June 2022 (for AY 2021-2022) June 2023 (for AY 2022-2023) June 2025 (for AY 2024-2025) June 2026 (for AY 2025-2026)	
Results:	98% of students achieved 80% or higher in AY 2020-2021 98% of students achieved 80% or higher in AY 2021-2022 97% of students achieved 80% or higher in AY 2022-2023 98% of students achieved 80% or higher in AY 2024-2025 100% of students achieved 80% or higher in AY 2025-2026	
Revisions made to instrument:	None	
Actions Taken and Results:	None.	
Recommendations for Improvement:	The course has been a well-performing GE class, and additional faculty have taught the class over the past years. To ensure consistent quality across sections, the course champion should collaborate with all instructors to develop shared learning objectives, review curriculum periodically, and exchange best practices.	

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: 94% of students rated abilities as good or above (n=52) June 2024: 95% 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).	
Recommendations for Improvement:	Work with ASCM student club to increase response rates.	

Assessment Measure 3: Survey – Industry Employer	GOAL MET
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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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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 2025-2026)
Results:	June 2021: 90% of employers rated abilities as good or above (n=21) June 2024: 83% of employers rated abilities as good or above (n=21) June 2026: 96% 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 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 2026).	
Actions Taken:	None	
Recommendations for Improvement:	None	

Method of Assessment:

This assessment evaluates students' understanding of sustainability using questions developed and approved by a team of faculty.

Actions taken:

Direct Assessment Measure:

The exam is comprehensive of all aspects of sustainable construction. As more instructors teach the course, it is important to recognize that curriculum should stay consistent to ensure equal experiences and learning outcomes for all students.

Discussion:

Students consistently demonstrate strong performance in the direct assessment of this outcome, displaying thorough understanding and effective application of the required skills. Additionally, results from indirect assessments further confirm that students are achieving and retaining the intended learning objectives over time.

Recommendations for Improvement:

The course has consistently performed well as a General Education (GE) class, with multiple faculty members contributing to its instruction in recent years. To further strengthen the course, it is

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recommended that the course champion regularly collaborate with all instructors teaching the course. This collaboration should include the development and sharing of best practices, creation of common learning objectives, and periodic curriculum reviews to ensure consistency and relevance across all sections. Additionally, establishing a forum for faculty feedback and discussion can support ongoing improvement and adaptation to student needs.

Additional Data for Outcomes Assessment Measures:

Assessment Measure 1: Final Exam Scores

Quarter	Number of CM students who completed the final exam	Total number of CM students with 80% or more on Final Exam	Percent of students with 80% or more
F 20	44	43	97.73%
W21	47	47	100.00%
F21	39	38	97.44%
W22	75	73	97.33%
S22	78	77	98.72%
F22	76	75	98.68%
W23	78	75	96.15%
S23	81	79	97.53%
F23	75	73	97.33%
W24	76	74	97.37%
Spring 2024	6	6	100.00%
Summer 2024	10	10	100.00%
Summer 2024	17	17	100.00%
Fall 2024	14	14	100.00%
Winter 2025	38	37	97.37%
Winter 2025	2	2	100.00%
Winter 2025	9	9	100.00%
Winter 2025	2	2	100.00%
Spring 2025	20	20	100.00%
Spring 2025	12	11	91.67%
Spring 2025	7	7	100.00%
Summer 2025	9	9	100.00%
Summer 2025	4	4	100.00%
Fall 2025	19	19	100.00%
Fall 2025	1	1	100.00%
Fall 2025	6	6	100.00%
Fall 2025	2	2	100.00%
Winter 2026	18	18	100.00%
Winter 2026	5	5	100.00%
Winter 2026	2	2	100.00%
Winter 2026	7	7	100.00%
Winter 2026	4	4	100.00%
Spring 2026	10	10	100.00%

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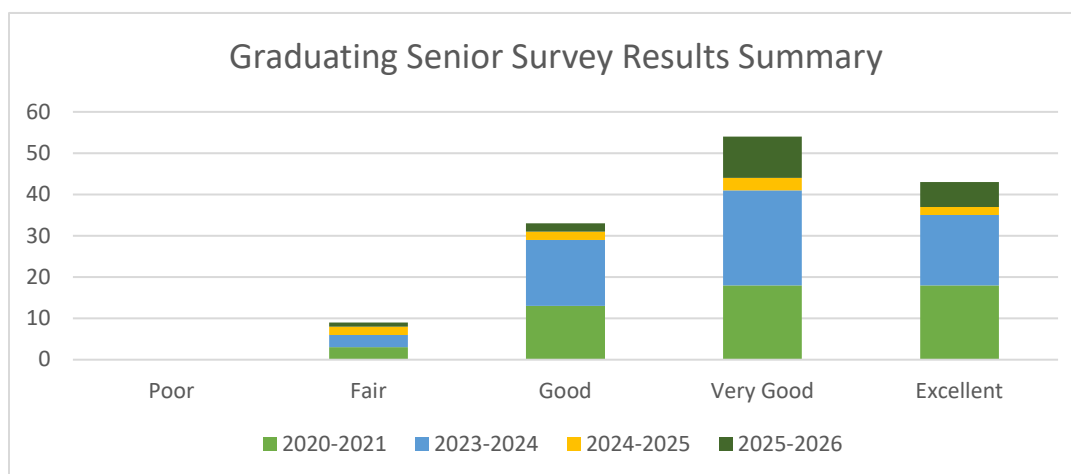
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Assessment Measure 2: Survey – Graduating Seniors

Rating	2020-2021	2023-2024	2024-2025	2025-2026
Poor	0	0	0	0
Fair	3	3	2	1
Good	13	16	2	2
Very Good	18	23	3	10
Excellent	18	17	2	6
Total Responses	52	59	9	19
Total - Good or Better	49	56	7	18
Percentage - Good or Better	94%	95%	78%	95%



Assessment Measure 3: Survey – Industry Employers

Rating	2020-2021	2024-2025	2025-2026
Poor	1	0	0
Fair	1	3	1
Good	6	7	6
Very Good	8	5	7
Excellent	4	3	11
Unable to Assess	1	3	5
Total Responses	21	21	30
Total - Good or Better	18	15	24
Percentage - Good or Better (excludes unable to assess responses)	90%	83%	96%

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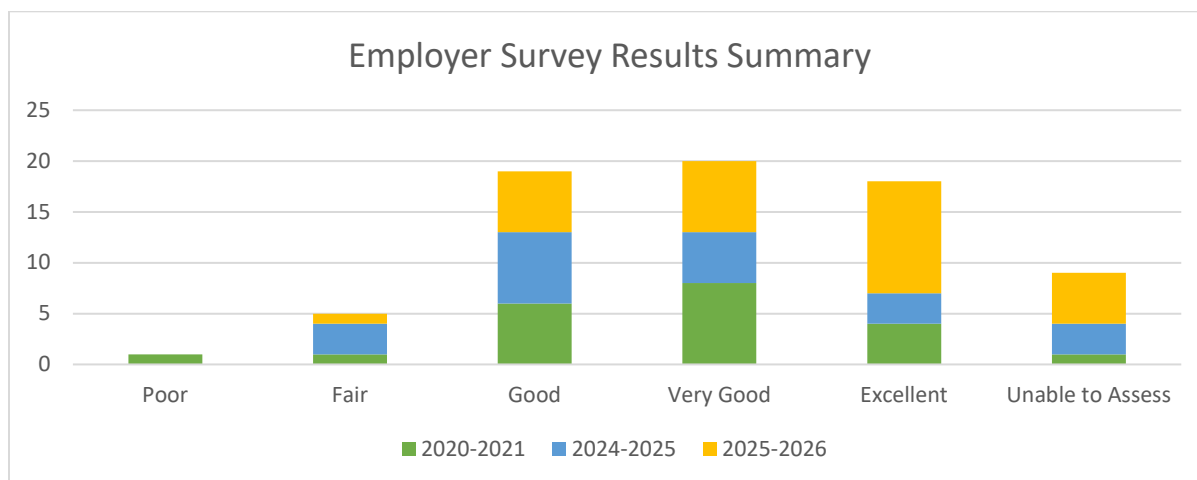
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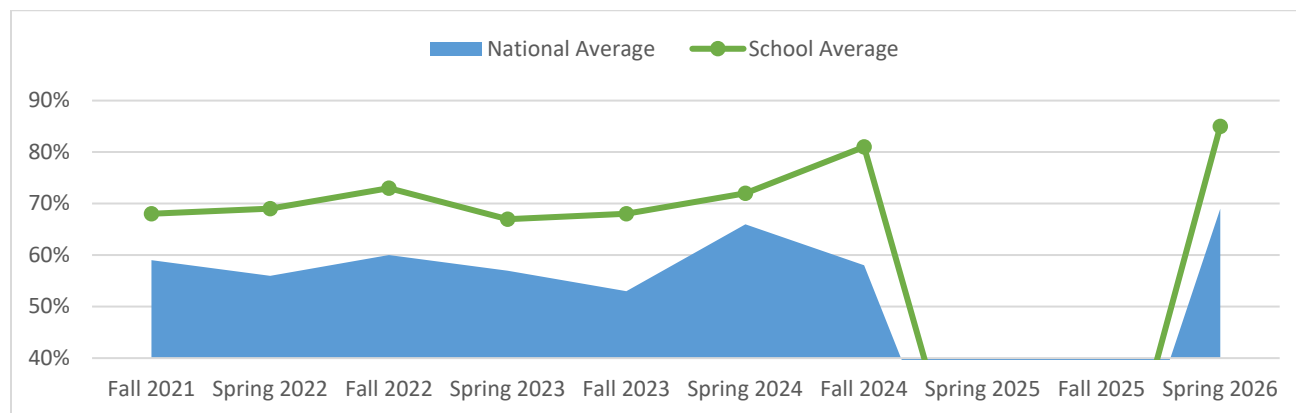


Assessment Measure 4: AIC Exam Results Summary:

Note that the AIC exam did not report results for PLO 15 in Spring 2025 and Fall 2025.

AIC Exam Results - PLO No.15

	Fall 2021	Spring 2022	Fall 2022	Spring 2023	Fall 2023	Spring 2024	Fall 2024	Spring 2025	Fall 2025	Spring 2026
School Average	68%	69%	73%	67%	68%	72%	81%	0%	0%	85%
National Average	59%	56%	60%	57%	53%	66%	58%	0%	0%	69%



Follow-up of the Impact of actions taken: None needed.

Description of any revisions made to the Degree Program assessment tool:

In future reports, we will no longer include Assessment Measure 2 - Survey – Industry Employer as an indirect assessment measure.

Maryam note -

No additional revisions to the assessment tool(s) are needed at this time.

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