

Outcomes Assessment

Student Learning Outcomes and Degree Program Objectives



CAL POLY

Construction Management

COLLEGE OF ARCHITECTURE
& ENVIRONMENTAL DESIGN

PLO# 11. Understand construction accounting and cost control.*

Assessment Measure Summary Results

Assessment Measure 1: Embedded Exam Questions		GOAL PARTIALLY MET
Type:	Direct Measure	
Course & Assignment:	CM 335 (Construction Accounting); Embedded questions in final exam	
Goal:	80% of students achieve 80% or better	
Date(s) of OAM reviews:	June 2024 (for AY 2023-2024) June 2026 (for AY 2025-2026)	
Results:	June 2024: 86% of students achieve 80% or better June 2026: 67% of students achieved 80% or better	
Revisions made to instrument:	AY 2025-2026: Stand-alone quiz created instead of questions embedded in exam; created to facilitate data reporting	
Actions Taken and Results:	At the mid-year review, it was discovered that students have been taking the course and completing the assignment, but data collection and reporting have been inconsistent. When new faculty took over, there was a gap in data collection. 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. However, even with this, results are not recorded consistently.	
Recommendations for Improvement:	Since the course converted to fully online, student understanding of accounting and cost control have gone down. It is recommended to offer this course in an in-person setting to see if scores improve. The course will need to be analyzed during semester conversion to identify areas to improve for student attainment of learning outcomes.	

Assessment Measure 2: Survey – Graduating Seniors		GOAL NOT 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: 73% of students rated abilities as good or above (n=52) June 2024: 86% 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: 75% 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 11: Construction Accounting

Date of Report: July 2026

**Previously PLO Number 14. 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 2025-2026)	
Results:	June 2021: 90% of employers rated abilities as good or above (n=21) June 2024: 75% of employers rated abilities as good or above (n=20) June 2026: 87% 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:

The direct assessment has not been changed. New faculty have taught the course and have noted that the course material prepares them well for the assessment and attainment of the learning outcome and that revisions are not necessary.

Discussion:

The assessment tool is still considered appropriate for this PLO. The assessment instrument is well structured and evaluates students' abilities to understand construction accounting and cost control.

Actions taken:

Direct Assessment Measure:

Discussion:

The fully online environment does not seem to be an effective way for students to learn and understand construction accounting and cost control. It also makes it challenging to collect data when faculty are

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working remotely. Each of these compound on each other to make it hard to see the true picture of students' learning. When looking at the data for industry employers and AIC exam results, students are performing. However, the direct assessment and students' perception of their learning attainment are inconsistent with these two measures.

Recommendations for Improvement:

Starting in Fall 2026, we will transition to a semester-based curriculum, and this course merges with another. Careful analysis of the data and learning outcomes should be conducted to ensure attainment of this PLO.

Following the transition to a fully online format, a decline in student understanding of accounting and cost control has been observed. To address this, it is recommended to pilot a return to in-person instruction and compare student performance outcomes. Additionally, conduct a comprehensive analysis during the semester conversion process to systematically identify and address areas requiring improvement, with the goal of enhancing student attainment of learning outcomes.

Additional Data for Outcomes Assessment Measures:

Assessment Measure 1: Embedded Exam Questions with Rubric

Quarter	Number of CM students who completed the quiz/exam	Total number of CM students with 80% or more on the quiz/exam	Percent of students with 80% or more
Fall 2024	25	16	64%
Spring 2026	60	40	67%

Assessment Measure 2: Survey – Graduating Seniors

Rating	2020-2021	2023-2024	2024-2025	2025-2026
Poor	1	0	0	0
Fair	13	8	2	5
Good	23	23	4	7
Very Good	7	24	1	5
Excellent	8	4	2	3
Total Responses	52	59	9	20
Total - Good or Better	38	51	7	15
Percentage - Good or Better	73%	86%	78%	75%

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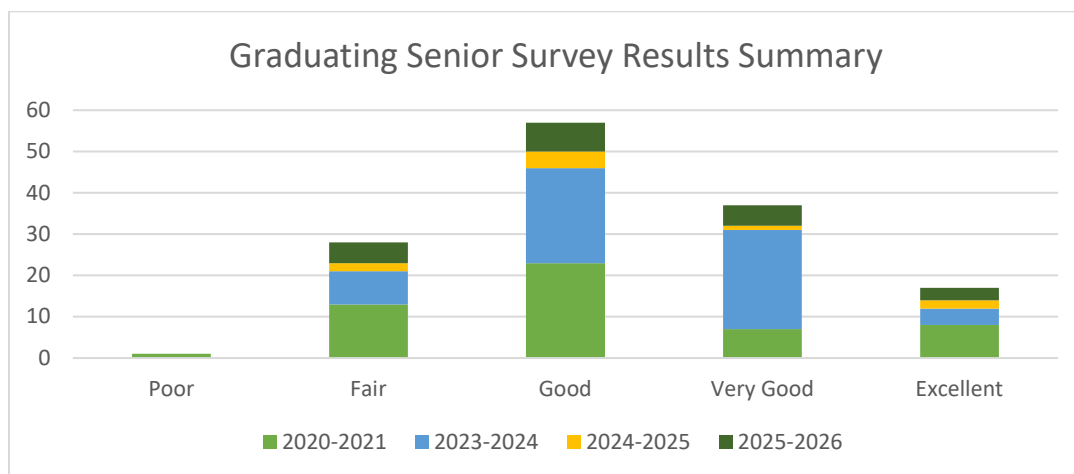
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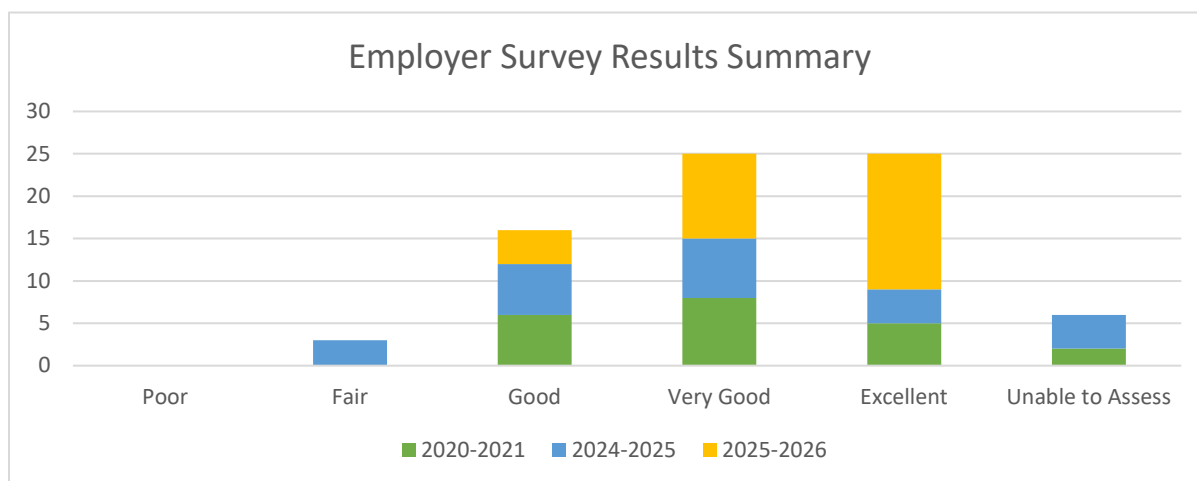
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Assessment Measure 3: Survey – Industry Employers

Rating	2020-2021	2024-2025	2025-2026
Poor	1	1	0
Fair	1	4	3
Good	6	12	6
Very Good	10	3	7
Excellent	2	0	7
Unable to Assess	1	0	7
Total Responses	21	20	30
Total - Good or Better	18	15	20
Percentage - Good or Better (excludes unable to assess responses)	90%	75%	87%



Assessment Measure 4: AIC Exam Results Summary:

AIC Exam Results - PLO No.11

	Fall 2021	Spring 2022	Fall 2022	Spring 2023	Fall 2023	Spring 2024	Fall 2024	Spring 2025	Fall 2025	Spring 2026
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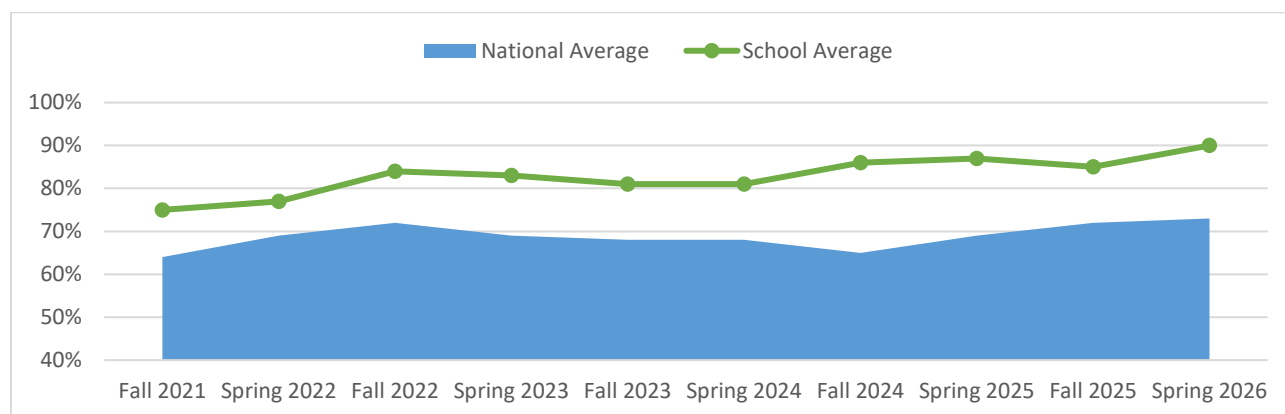
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School Average	75%	77%	84%	83%	81%	81%	86%	87%	85%	90%
National Average	64%	69%	72%	69%	68%	68%	65%	69%	72%	73%



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