Bachelor of Science in Mathematics

Mission

The mission of the Hawaii Pacific University Mathematics Program is to promote analytical thinking and quantitative literacy; foster a lifelong appreciation of mathematics; and enable students to use mathematical methods and appropriate technology in real world and abstract environments.

Academic year 2025

Bachelor of Science in Mathematics Learning Outcomes

Program Learning Outcome 1

Interpret, calculate, analyze, represent, and clearly communicate quantitative information through mathematical tools (e.g., equations, graphs, or diagrams).

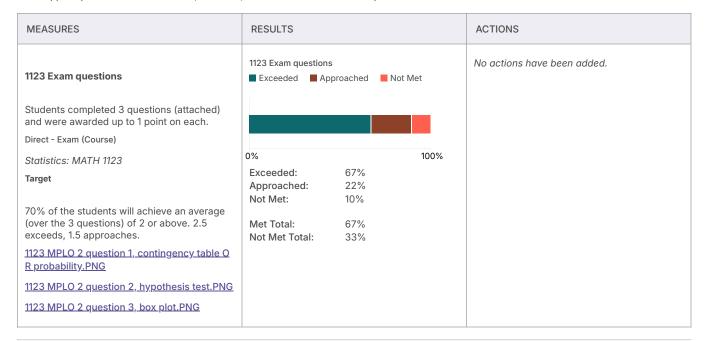
MEASURES	RESULTS		ACTIONS
Optimization Word problem	MET Optimization Word problem ■ Exceeded ■ Met ■ Approached		No actions have been added.
Students completed the attached problem as part of the final exam. and it was scored on a rubric with 5 criteria	Not Met		
Direct - Exam (Course)			
Calculus I: MATH 2214			
Target	0%	100%	
70% of the students will average 2.5 of higher across the rubric. 2 -2.4 is approaching expectations, 2.5-2.9 is meeting expectations and 3 or above is exceeding expectations Critical Thinking Writing Assignment2023.do CX	Exceeded: 51% Met: 22% Approached: 5% Not Met: 22% Met Total: 73% Not Met Total: 27% Summary summarize results including discus performance on each criterion MPLO Fall 2024 Pat.xlsx	sing	
	PLO Math 2214 Fall 2024.xlsx Analysis Decline in algebra skills since the pandemic. Students either did real on the entire problem or really poor		

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Exponential Generating Function for Derangements	No results have been added.	No actions have been added.
Students were asked to find the exponential generating function for the derangements on a set of n elements and prove their result		
Combinatorics and Graph Theory: MATH 4301		
Target		
67% to score 3 or higher Math 4301 Fall 2023 MPLO 1.docx		

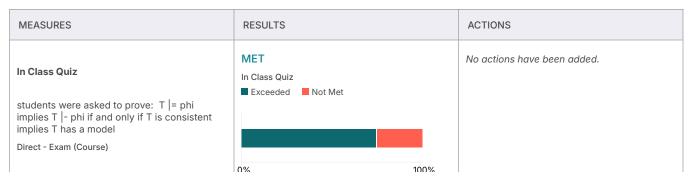
Program Learning Outcome 2

Solve applied problems in mathematics, statistics, or in other math-based disciplines.



Program Learning Outcome 3

Construct and critique mathematical proofs.



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Fndtn Math Logic & Application: MATH 3110	Values are not shown wh	en too close to each other.	
Target	Click or use arrow keys to	see details.	
larget			
	Exceeded:	75%	
75% score above 3	Not Met:	25%	
PLO Math 3110 Fall 2024.xlsx			
1 EO Watti 3110 i ali 2024.xi3x	Met Total:	75%	
	Not Met Total:	25%	
	Analysis		
	Four students were	tostad Throa	
	achieved a perfect		
		erfect. One student	
		prehending the proof.	
		on a scale 1-4 was 3.25	
	and average score (711 a 30aic 1 - Was 3.23	

Program Learning Outcome 4

Develop comprehensive oral skills using the language of mathematics in order to articulate mathematical ideas and explain results.

MEASURES	RESULTS	ACTIONS
Partial differential equation and presentation Students completed the attached problems as assignments and present the work in the class, and it was scored with 5 criteria. Direct - Assignment	MET Partial differential equation and presentation ■ Exceeded	No actions have been added.
Methods of Appl Mathematics I: MATH 4470 Target	0% 100% Values are not shown when too close to each other. Click or use arrow keys to see details.	
70% of the students will average 2.5 of higher. 2 -2.4 is approaching expectations, 2.5-2.9 is meeting expectations and 3 or above is exceeding expectations pde HW and project.pdf	Exceeded: 100% Met Total: 100% Not Met Total: 100% Analysis The student solved all the problems, presented the mathematics work and explained the ideas in class clearly and fluently. Minor mistakes were pointed out by instructor.	