Insert Academic Degree Name Here

Annual Program Report Template

Year:	AY2022-2023
Program:	Physics
Contact Person (include email & phone#)	Cengiz Sen, <u>csen@lamar.edu</u> , ext. 7876

Summary of Continuous Improvement Efforts since Last Report

Provide a brief description of how assessment results have been used for program improvement. Point to a specific example of how an assessment provided the program with data it could use for improvement and what that improvement was, if possible, also show evidence of the improvement. You may look at data from the two previous academic years to support this case.

Respond here: We met all our targets for AY2022-2023 in all student learning outcomes SLO 1-3. For details, please see notes 5-7 below.

Program Highlights Since Last Report

Identify and briefly discuss any programmatic curriculum changes made since the last report (e.g., new courses, course changes, SLO changes, course deletions).

Respond here: No curriculum changes have been made since last report.

Table 1. Assessment Results and Analyses for Current Cycle.

STAGE 1: PLAN				STAGE 2: DO		STAGE 3: STUDY
Departmental Student Learning Goal	Program Student Learning Outcome	Assessment	Assessment Method/Locati on	Benchmark Expectations	Data Results	Actions/Goals Based on Data Results* What do the data tell you? How will you use this data? How were data from the last cycle used to make changes during this cycle, and What were the results of those changes?
See note (1) below	Develop proficiency in critical thinking	Met	See note (4)	85% at or above skill level 3	See note (5)	See the last paragraph of note (5)
See note (2) below	Develop mathematical models and standard derivations in Physics	Met	See note (4)	85% at or above skill level 3	See note (6)	See the last paragraph of note (6)
See note (3) below	Communicating Physics processes in writing	Met	See note (4)	85% at or above skill level 3	See note (7)	See the last paragraph of note (7)

(1) Students will learn about basic

light-matter

interaction; interference; diffraction; spectroscopy; photonics and lasers; fiber optics (PHYS4480, Optics). These courses are used to assess SLO #1.

(2)

Their distribution is indicated with percentages in the Rubric. In calculating the percentages, we used the following procedure: For each student in each skill investigated, we obtained scores by averaging those received from faculty members. Then, for each area investigated, we calculated the percentage of students that fall within each skill level.

(5) COMBINED DATA FOR OUTCOME 1, 2022-2023 (7 students)

The following table illustrates the results of our analysis for the 2022-2023 AY:

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l	0.00%	0.00%	23,81 <mark>%</mark>	75.1.8%	100.00%
	<u>1,000</u>	^ ^^Q.cc#	<u></u> ^ ^ Cloce		6 <u></u>
100.00%	III	0.00%	6 0.00%	6 23.81 9	% 76.19%
100.00%	IV	0.00%	6 0.00%	6 28.57 9	% 71.43%

Based on the above data, we reached our goal of 85% cumulative threshold at or above Level #3 for all skills I-IV. Thus, we consider that Outcome 1 is met. Since every year we test a relatively small number of students, it is more helpful to compare this year's results (combined) with the cumulative results of the past few years. Such cumulative results and combined results are as follows:

CUMULATIVE DATA FOR OUTCOME 1, 2009-2022 (153 Students)



COMPARATIVE DATA FOR OUTCOME 1, 2022-2023 vs. 2009-2022

SKILL	LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4	TOTAL > 3
<u></u>	1 E 10/	12 700	-0-200/ <u></u>	and the second	and the state
-5.07%	14.12%		<u>^ ^10í</u>	-	-2.33%
-2.51%	2% -1.84	% 111119.54	% 💠 🗆 17.709	6-11	V

The comparative data reveals an incremental improvement as shown in the last column, but due to poor statistics, this cannot be relied upon. We will continue to monitor comparative statistics for tracking purposes.

(6) COMBINED DATA FOR OUTCOME 2, 2022-2023 (6 students)

The following table illustrates the results of our analysis for the 2022-2023 AY:

-4 -	LUT AT \$35	5段回回				îi . S îs.
%	100.00%	1	0.00%	0.00%	33.33%	66.67
%	100.00%	II	0.00%	0.00%	27.78%	72.22
<u>%.</u>	100.00%	- wanta wanta pisikar	0 00%	יון <u>ממט און</u>	27.78%	Z2.22
6	77,77%	100.00%	IV	0.00%	0.00%	27.78

Based on the above data, we reached our goal of 85% cumulative threshold at or above Level #3 for all skills I-IV. Thus, we consider that Outcome 2 i.96 Tfutcome

COMPARATIVE DATA FOR OUTCOME 3, 2022-2023 vs. 2009-2022



The comparative data reveals an incremental improvement as shown in the last column, but due to poor statistics, this cannot be relied upon. We will continue to monitor comparative statistics for tracking purposes.

(8) Skill levels:
Level 1: Unacceptable
Level 2: Poor
Level 3: Acceptable deficiencies.
Level 4: Well done 4 points. The student shows command of the subject.