

LBHC Program learning outcome report (2022-23)

I. General information

Degree name	Mathematics
Degree option names	Math and pre-engineering
Date report submitted	07/10/2023
Program faculty who contributed to this report	Dorci and Amber
Program learning outcome (refer to your program learning outcomes curriculum map and plan for the PLO to be formally assessed this year)	Analyze math facts, concepts, and relationships (through written work elucidating organizational computation steps, providing an explanation of a solution where appropriate and hand drawing graphs of functions and other relations).
Course that formally assesses this program learning outcome at its highest level (see program learning outcome curriculum map and plan)	MA 121
Number of students assessed for this program learning outcome	46
Semester students were assessed (e.g., fall 2023)	Fall 2022, spring 2023, summer 2023



II. Assessment of indicators for the program learning outcome (add more rows if necessary)

Break down your program learning outcome into indicators (maybe taken from rubric): Students should be able to...	List the most significant teaching and learning activities used by faculty to facilitate the learning of <u>each PLO indicator</u> in their class(es)	List the graded assignment(s) that formally assesses each indicator at its highest level	Results of assessment: For each indicator, record the % or # of students who performed below, at, or above expected levels (or enter whatever information makes sense to you)	Overall, how well did the students perform on each indicator? (insert an "X" before the appropriate statement)
Analyze math facts	Group work, lecture, discussion, examples on board	Quizzes, tests, assignments (work is required to be shown)	Below expected levels: 30% At expected levels: 55% Above expected levels: 15%	Below expected levels X At expected levels Above expected levels
Analyze math concepts	Group work, lecture, discussion, examples on board, vocab sheets	Quizzes, tests, assignments (work is required to be shown)	Below expected levels: 30% At expected levels: 55% Above expected levels: 15%	Below expected levels X At expected levels Above expected levels
Analyze math relationships	Group work, lecture, discussion, examples on board	Quizzes, tests, assignments (work is required to be shown)	Below expected levels: 30% At expected levels: 55% Above expected levels: 15%	Below expected levels X At expected levels Above expected levels

III. Overall assessment of this program learning outcome (please be thorough in all responses)

<p>Overall, how well did the students perform on this PLO? (insert an “X” before the appropriate statement)</p>	<p>Below expected levels X At expected levels Above expected levels</p>
<p>Analyze assessment of PLO indicator results in section II: What does the information in section II suggest to you about the performance expectations, the teaching strategies, and student learning?</p>	<p>In general most students performed at an expected level with math facts, concepts, and relationships. They struggle most with solving for the indicated variable, word problems, and graphing.</p>
<p>Next steps: Plans for reinforcing effective teaching and learning strategies and for improving student learning (clearly identify what will be done, by whom, by when, and how you will assess the impact of the changes)</p>	<p>Incorporate more time, instruction, and group work in areas/sections that involve solving for indicated variables, word problems, and graphing.</p>
<p>Projected semester of implementing “next steps”</p>	<p>Fall 2023 and spring 2024</p>
<p>Results of “next steps” implementation on student learning – this section is to be completed the following year (describe how the implementation of the above “next steps” impacted student learning in the program)</p>	<p>Implemented a “lab time” where students worked together in groups on their homework and instructor and tutors where available. There was a slight increase in success rates. Need more instruction on appropriateness of lab time and group work.</p>
<p>Date “results of ‘next steps’ implementation” section above submitted</p>	<p>06-03-2024</p>
<p>Suggestions for improving this report or process (if any)</p>	