

ANNUAL

REPORT OF PROGRAM DATA

2023

A photograph of a campus landscape featuring a winding paved path, green grass, and modern buildings in the background. The image is overlaid with a semi-transparent purple filter and a white geometric design consisting of several intersecting lines forming a diamond shape.

UNIVERSITY *of* HAWAI'I

HAWAI'I

COMMUNITY COLLEGE

July 1, 2022 through June 30, 2023

Co-Req Math

1. Program or Unit Mission

Hawaii CC has STEM and non-STEM mathematics pathways. We teach a variety of first-year math courses and offer a single level of remediation for those students that do not place into college-level math courses. Math 78C is targeted for incoming students with math skills below that of a general college-level course but who do not want to spend an extra semester in remediation. Instead, students are able to take a college-level course (e.g. Math 100 or Math 115) with Math 78C as a co-requisite. As a co-requisite course, Math 78C is not a program and has no specific PLOs. Instead, it follows the SLOs for the individual math courses for which it is co-req'd and the PLOs for the program they belong to (Liberal Arts, Natural Science, etc.).

Math 78C will serve as a co-requisite for Math 100 or Math 115 students who do not place into that course but require remediation. Students will be able to take Math 78C/Math 100 or Math 78C/Math 115 instead of having to take Math 75X (first semester) and then Math 100 or Math 115 (second semester), thus fast-tracking students towards completion of a college math course within the first year.

2. Program Student Learning Outcomes

- a) *List of the Program Student Learning Outcomes or Unit/Service Outcomes*
- b) *Program or Unit/Service Outcomes that have been assessed in the year of this Annual Review.*
- c) *Assessment Results.*
- d) *Changes that have been made as a result of the assessment results.*

As a co-requisite course, there are no Program Learning Outcomes for Math 78C. This course is linked with the Liberal Arts PLOs (#2 - Think Critically and #3 Reason Quantitatively) and the math courses for which it is co-req'd. Therefore, there is no separate assessment of the Math 78C course; assessment only takes place within a co-req'd Math 100 or Math 115 course. Math 78C was not offered in AY 2022/2023. In the future, we will include results for Math 78C when Math 100 or Math 115 is assessed - if a co-req'd section of Math 100 or Math 115 is scheduled.

3. Analysis of the Program/Unit

[UHCC Annual Report of Program Data \(VARPD\)](#)

Sixty-three percent of first year Hawai'i CC students enrolled in a math class in their first two semesters. This does not meet the UH System enrollment goal of 100% enrollment in a math class during the first year of study.

The efficiency goal for 2024 is to have 70% of students placed at one-level below college ready to pass college-level math within a semester of enrolling. In 2022-2023, 56%(n = 18) of students one-level below college-level math passed college-level math in the first semester. This is below the goal of 70% but also a significant improvement from the previous year(44%). For students who placed two-levels below, the 2024 goal is 50% passing college-level math within one year of enrolling in math. In the 2022-2023 year, 21%(n = 38) of students that placed two-levels below completed college-level math. In general, our lowest level math placers are still far below the goals set. Interestingly, 33%(n = 6) of students who had no math placement passed college-level math within two semesters of enrolling in 2022-2023. Overall, 53% of new students completed a college level math course, which is encouraging.

Looking closer, the ARPD data (see table below) seems to be skewed for the placement of students at 1- and 2-levels below college-level math. For students that placed 1-level below, the ARPD shows 18 total students enrolled and 10 completed. The actual number of students enrolled in Math 75X and Math 82X, courses that are remediation for students that place one-level below college math, was 113 students and 80 passing the courses. The low completion rate for those students that place below college level, may be due to the number of students who placed two levels below being enrolled in a 1-level below course. These students are forced to enroll in the 1-level below courses because we don't offer lower levels of remediation.

Many of our students are enrolled part-time, adjust their schedules without the input of an academic advisor, and complete certificates that do not require a math course. The UH System enrollment goal of 100% during the first year of study continues to be unachievable without a system in place that is built into Banner/STAR that requires students to enroll in Math courses their first year.

2023 Hawai'i Community College ARPD
Program: Co-Req Math

College: Hawai'i Community College
Program: Co-Req Math

Print ARPD

ENROLLMENT GOAL: 100% of new students enroll in Math in their first year

Fall Semester	New Students ^{1/}	Enrolled in Any Math	% Enrolled	Did Not Enroll	% Not Enrolled
Fall 2020	405	239	59%	166	41%
Fall 2021	329	176	53%	153	47%
Fall 2022	335	210	63%	125	37%

^{1/} Entering fall as first-time freshmen or first-time at campus transfers, no prior Math courses, classified, degree-seeking only.

EFFICIENCY BY PLACEMENT GOALS:

1. By 2021, 75% of students placed at one level below college-ready standards will complete their college-level Math course within one semester of enrolling in Math.
2. By 2021, 70% of students placed at two or more levels below college-ready standards will complete their college-level Math course within one year of enrolling in Math.

Math Placement	AY 2020-2021			AY 2021-2022			AY 2022-2023		
	Enrolled	Completed ^{2/}	% Completed College Level	Enrolled	Completed ^{2/}	% Completed College Level	Enrolled	Completed ^{2/}	% Completed College Level
College	392	225	57%	292	161	55%	337	190	56%
1-level	10	3	30%	9	4	44%	18	10	56%
2+ levels	45	24	53%	49	21	43%	38	8	21%
Technical Math	1	0	0	0	0	0	0	0	0
No Placement	6	3	50%	5	5	100%	6	2	33%
TOTAL	454	255	56%	355	191	54%	399	210	53%

^{1/} First-time attempters/enrolled in Math; no prior subject history; classified, degree-seeking only.

^{2/} Completed within one semester for College and 1-level, within two semesters for 2+ and no placement levels.

STUDENT LEARNING GOAL: All students meet course student learning outcomes.

Math Course	AY 2020-2021			AY 2021-2022			AY 2022-2023		
	Enrolled	Completed	% Completed	Enrolled	Completed	% Completed	Enrolled	Completed	% Completed
100	291	224	77%	288	179	62%	307	211	69%
103	69	49	71%	55	36	65%	49	37	76%
115	129	101	78%	115	79	69%	97	68	70%
75X	0	0	0	83	50	60%	90	65	72%
82X	42	27	64%	30	22	73%	23	15	65%

4. Action Plan

In the previous reviews, we were hoping to create an experimental co-req'd Math course to help with remediation for Math 100. Since then, Math 78C was created and approved to be used as a co-req course for Math 100 and 115. We plan to determine success levels of Math 78C/Math 100 and Math 78C/Math 115 as compared to the original pathway (Math 75x followed by Math 100 or Math 115) and will analyze success rates when we have run enough sections to be meaningful.

The last several times we have tried to run this course it has failed to fill and was canceled. Our action plan for this year includes working closely with the academic advisors to recruit students for the co-Req math courses. We also plan to revise how the two co-req'd courses are scheduled to promote student success and optimize the benefits of the Math 78C course. These changes include creating a stacked schedule for the Math 78C and its co-req'd course, rather than scheduling the classes on alternate days or a block on Fridays.

We plan to continue to offer Math 78C as a co-requisite to Math 100 and Math 115. In the past, we have had successful enrollment and outcomes for Math 78C when it was taught face-to-face. The COVID-19 pandemic and the switch to distance education continues to make it difficult to run the course due to low enrollment. We plan to continue to try to offer Math 78C as an option for Math 100 and Math 115 to further the goal of the college and the UH System to have all students complete their college-level math courses within the first year of enrollment.

5. Resource Implications - Special Resource Requests

☐ I am NOT requesting additional resources for my program/unit.

☒ I AM requesting additional resource(s) for my program/unit.

Total number of items being requested: 1

✓ Item Description:

Texas Instruments [TI-30XIIS Scientific Calculator](#)

✓ Justification:

To support students that place 1- to 2- levels below college entry math courses. The purchase of calculators will create uniform syntax entry, applications, and learning opportunities within all courses. These calculators have the capability to complete all calculations necessary for the Math 78C, Math 75X, Math 82X, Math 100, and Math 115. If our remedial students are given uniform

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calculators to use in their developmental courses, they will have the opportunity to build skills and confidence in the use of the calculators and can take those skills to their college level courses and ultimately be more successful in them.

CATEGORY	Category-Specific Information Needed			
Equipment	Aug 1, 2024	70 units; \$20 each	\$1400 (with S&H, tax)	On Inventory List (N/A); TI-30X IIS calculators