

MATH Co-Requisite



2019

ANNUAL REPORT OF PROGRAM DATA



UNIVERSITY of HAWAI'I®
HAWAI'I
COMMUNITY COLLEGE

1. Program Description

Statement and brief description of the program including a listing of the program level Student Learning Outcomes (SLOs).

Hawaii CC teaches mathematics but does not have a first-year math program. However, we do teach first-year math courses. There are no program SLOs, and the Course Learning Outcomes (CLOs) for math courses are the same as for the program they belong to (Liberal Arts, AS Natural Science, etc.)

2. Analysis of the Program

Strengths and weaknesses in terms of demand, efficiency, and effectiveness based on an analysis of the Quantitative Indicators. CTE programs must include an analysis of Perkins Core indicators for which the program did not meet the performance level. Include Significant Program Actions (new certificates, stop outs, gain/loss of positions, results of prior year's action plan).

Fifty-eight percent of first year Hawaii CC students enrolled in a math class in their first two semesters. That is a small (<2%) increase from the previous year. This does not meet the enrollment goal of 100% enrollment in a math class during the first year of study.

The efficiency goal for 2021 is to have 75% of students placed at one-level below college ready to pass college-level math within a semester of enrolling in math. In 2016-17, 37% of students one-level below college-level math passed college-level math in the first semester. In 2017-18, this dropped to 29%, but for the current reporting year (2018-19), 100% of students one-level below college math passed college-level math in their first year. This more than meets the goal set for 2021 of 75%. For students who placed two-levels below, the 2021 goal is 70% will pass college-level math within one year of enrolling in math. In the 2016-17 year, 39% of students placed two-levels below completed college-level math. In 2017-18, this had decreased to 28%, but in 2018-19, it had risen to 31%. In general, the trend is improving for our lowest level math placers but is still far below the goal set – there is a lot of work to do with our most math-challenged students over the next three years. Interestingly, 75% of students who had no math placement passed college-

level math within two semesters of enrolling in 2016-17, 47% completed in 2017-18 and 82% passed in 2018-19.

We find the data table presented in the ARPD website to be confusing. Although these are presented as learning outcomes on the data sheet, it is actually passing grades that are being measured, not learning outcomes. In addition, the stated goal of 100% enrollment is not achievable, especially in an Open Doors institution where many students are part-time and many are enrolled for specific courses, not to complete a major that requires mathematics.

3. Program Student Learning Outcomes

- a) List of the Program Student Learning Outcomes
- b) Program Student Learning Outcomes that have been assessed in the year of the Annual Review of Program Data.
- c) Assessment Results
- d) Changes that have been made as a result of the assessments.

There are no Program Learning Outcomes for Co-req MATH. These courses are reviewed under the Liberal Arts PLOs. Math 135 and 241 were assessed in the 2018-19 year but are not a part of the co-req Math sequence. Those assessments are reported in the Liberal Arts Annual Program Review.

4. Action Plan

Include how the actions within the plan support the college's mission. In addition to the overall action plan for the program, include specific action plans for any Perkins Core Indicator for which the program did not meet the performance level.

We are working on improving the instruction of our remedial math courses to try to meet the needs of those who enroll with math skill levels that are below and often significantly below college level. We plan to do trial runs of a Co-Req MATH course that accompanies MATH 100 to determine success levels compared to a pre-req course followed by MATH 100.

5. Resource Implications

(physical, human, financial)

Faculty will continue to need resources for training in co-req and pre-college math instruction. There should be funds to send math faculty to instructional workshops at least once per year and to meet with other UHCC faculty at least once per year. Tutors and peer mentors are required to maintain a high instructor:student ratio for classrooms where students are struggling.