

HAWAI‘I COMMUNITY COLLEGE ANNUAL PROGRAM REVIEW (APR)

Co-Req Math

Date: 8 March 2019

**Review Period
July 1, 2017 to June 30, 2018**

Initiator: Pamela Y. Scheffler

Writer(s): James Schumaker, Jesna Nissam, Josh McDaniel, Toni Craven, Pamela Y. Scheffler

Program/Unit Review at Hawai‘i Community College is a shared governance responsibility related to strategic planning and quality assurance. Annual and 3-year Comprehensive Reviews are important planning tools for the College’s budget process. This ongoing systematic assessment process supports achievement of Program/Unit and Institutional Outcomes. Evaluated through a college-wide procedure, all completed Program/Unit Reviews are available to the College and community at large to enhance communication and public accountability. Please see <http://hawaii.hawaii.edu/files/program-unit-review/>

Please remember that this review should be written in a professional manner. Mahalo.

Program Description

Provide a short description of the co-req program in English or Math.

Hawaii CC teaches mathematics but does not have a math program. However, we do teach first year math courses.

ARPD Data: Analysis of Quantitative Indicators (required by UH System)

Program data can be found on the ARPD website: <http://www.hawaii.edu/offices/cc/arpd/>

Analyze the program's data for the review period.

Describe, discuss, and provide context for the data based on the categories included in the ARPD data sheet provided by UH Systems.

Fifty-seven percent of first year Hawaii CC students enrolled in a math class in their first two semesters. That is a small (3%) 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%. 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%. Interestingly, 75% of students who had no math placement passed college-level math within two semesters of enrolling in 2016-17 and 47% completed in 2017-18.

We find the data presented 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

<p>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.</p>	
<p>What else is relevant to understanding the program's data? Describe any trends, internal/external factors, strengths and/or challenge that can help the reader understand the program's data but are not discussed above.</p>	<p>There is no co-requisite math program at Hawaii CC. Math is taught in the Math and Natural Sciences Department within Liberal Arts. Therefore program level goals do not exist because there is no program.</p> <p>We have recently reorganized the math progression at the College and not offering a full progression of math courses is relatively new for the College and the students. Many students struggle when taking higher level (but still below college-level) courses without the benefit of review or study of earlier math concepts.</p>

PROGRAM ACTIVITIES

<p>Report and discuss all major actions and activities that occurred in the program during the AY17-18 review period.</p>

AY 17-18 is the first year that Math and Natural Sciences Department has been asked to write an Annual Program Review for co-requisite math. We do not teach any co-requisite math courses although we have plans to pilot one in fall 2019.

Liberal Arts students entering Hawaii CC can take any of the following math courses, depending on placement:

- Math 26: Elementary Algebra
- Math 76: Intro to Math Reasoning
- Math 100: Survey of Mathematics
- Math 103: Intro to College Algebra
- Math 115: Statistics
- Math 120: Trigonometry for Surveying
- MATH 135: Pre-Calculus: Elementary Functions
- Math 140: Pre-Calculus: Trigonometry and Analytic Geometry
- Math 241: Calculus I
- Math 242: Calculus II

AY18-19 PROGRAM ACTION PLAN

Provide a detailed narrative discussion of the program's overall action plan for AY18-19, based on analysis of the Program's AY17-18 data and the overall results of course learning outcomes assessments conducted during the AY17-18 review period.

This Action Plan should identify the program's specific goals and objectives for AY18-19 and must provide benchmarks or timelines for achieving each goal.

Action for math classes is planned at Math and Natural Science Department meetings. We have no specific course outcome assessment for co-req math (there is no Program). All math classes assessed and planned for assessment are recorded in the Liberal Arts Annual Program Review.

Goals for math courses (when they are planned) are contained in the Liberal Arts APR.

ACTION ITEMS TO ACCOMPLISH ACTION PLAN

For each Action Item below, describe the strategies, tactics, initiatives, innovations, activities, etc., that the program plans to implement in order to accomplish the goals described in the Action Plan above.

For each Action Item below, discuss how implementing this action will help lead to improvements in student learning and their attainment of the program’s learning outcomes (PLOs).

Action Item 1:

n/a

Action Item 2:

n/a

Action Item 3:

n/a

--

LEARNING OUTCOMES ASSESSMENTS

For all parts of this section, please provide information based on CLO (course learning outcomes) or PLO (program learning outcomes) assessments conducted in AY17-18.

Courses Assessed

List all program courses assessed during AY17-18, including Initial and “Closing the Loop” assessments.			
Assessed Course Alpha, No., & Title	Semester assessed	CLOs assessed (CLO#s)	PLO alignment (PLO#s)
See Liberal Arts APR. There is no co-req Math Program with separate course assessment.			

“Closing the Loop” Assessed Course Alpha, No., & Title	Semester assessed	CLOs assessed (CLO#s)	PLO alignment (PLO#s)

Assessment Strategies

For each course assessed in AY17-18 listed above, provide a brief description of the assessment strategy, including:

- a description of the type of student work or activity assessed (e.g., research paper, lab report, hula performance, etc.);
- a description of how student artefacts were selected for assessment (e.g., the assessment included summative assignments from all students in the course, OR a sample of students’ summative assignments was randomly selected for assessment based on a representative percentage of students in each section of the course);
- a brief discussion of the assessment rubric/scoring guide and the criteria/categories and standards used in the assessment.

Course Alpha/#:

Course Alpha/#:

Course Alpha/#:

Course Alpha/#:

Expected Levels of Achievement

For each course assessed in AY17-18 listed above, state the standard (benchmark, goal) for student success for each CLO assessed AND the percentage of students expected to meet that standard for each CLO.

Example: “CLO#1: The standard for student success is that students will answer 80% of the questions on the final exam related to CLO#1 correctly. The expectation is that 85% of students will meet this standard for CLO#1.”

Example: “CLO#4: The standard for student success is that students will be able to perform skills associated with CLO#4 with 80% proficiency. The expectation is that 75% of students will meet this standard for CLO#4.”

Assessed Course Alpha, No., & Title	Assessed CLO#	Standard for Success	% of Students Expected to Meet Standard

Results of Course Assessments

For each course assessed in AY17-18 listed above, provide:

- a statement of the quantitative results;
- a brief narrative analysis of those results.

Course Alpha/#:

--

Course Alpha/#:

Course Alpha/#:

Course Alpha/#:

Other Comments

Include any additional information that will help clarify the program's course assessment results, successes and challenges.

Discuss, if relevant, a summary of student survey results, CCSSE, e-CAFE, graduate-leaver surveys, special evaluations, or other assessment instruments that are not discussed elsewhere in this report.

Next Steps – ASSESSMENT ACTION PLAN for AY18-19

Describe the program’s intended next steps to improve student learning, based on the program’s overall AY17-18 assessment results.

Include any specific strategies, tactics, activities or plans for improvement in program or course assessment practices, methods or tools, rubrics, schedules, etc.

All math course assessment and next steps are contained in the Liberal Arts APR.

