HAWAIʻI COMMUNITY COLLEGE
PROGRAM ANNUAL REVIEW (APR)

INFORMATION TECHNOLOGY (IT)

Date: November 17, 2017

Review Period
July 1, 2016 to June 30, 2017

Initiator: Robert Yamane
Writer(s): Carrie Butler

Program/Unit Review at Hawaiʻi 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.
**PART 1: PROGRAM DATA AND ACTIVITIES**

**Program Description** *(required by UH System)*

| Provide the short description as listed in the current catalog. | The Information Technology program is a career-laddered, competency-based program that provides training in the use and support of business-related computer systems, data communication networks (including local area networks), and the development of business computer information systems programs using procedural, event-driven and object-oriented programming techniques. The program includes a combination of business, computer, and information technology courses. Campus-based computer and networking projects, faculty supervised laboratories, and workplace internships provide hands-on experience designed to prepare students for positions in computer support, programming, network administration, or systems development in a business information technology system. The program focuses on computers and information technology as tools to solve business problems. |

**Comprehensive Review information** *(required by UH System)*

| Provide the year and URL for the location of this program’s last Comprehensive Review on the HawCC Program/Unit Review website: [http://hawaii.hawaii.edu/files/program-unit-review/](http://hawaii.hawaii.edu/files/program-unit-review/) | Year: 2015  
URL: [http://hawaii.hawaii.edu/files/program-unit-review/docs/2015_it_comprehensive_program_review.pdf](http://hawaii.hawaii.edu/files/program-unit-review/docs/2015_it_comprehensive_program_review.pdf)  
Provide a short summary of the CERC’s evaluation and recommendations from the program’s last Comprehensive Review.  
Discuss any significant changes to the program that  
- Recommend that you actively continue with your recruitment and retention efforts to support your student body and positively increase your graduating majors.  
The program coordinator during this time increased recruitment efforts at local high schools to increase enrollment. Enrollment for the first year, first semester cohort in Fall 2017 was at full |
were aligned with those recommendations but are not discussed elsewhere in this report. capacity. We will continue to look at retention and implement tutoring for difficult classes.

- Consider if creating a pathway to the UH four-year degree program is worthwhile for the IT program.
  We will be looking at this in the future. Some jobs do require a bachelors’ degree and having a pathway will be helpful.

**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/](http://www.hawaii.edu/offices/cc/arpd/)

**Please attach a copy of the program’s data tables and submit with this Annual Program Review (APR).**

- If you will be submitting the APR in hard copy, print and staple a copy of the data tables to the submission; the icon to print the data tables is on the upper right side, just above the data tables.
  OR

- If you will be submitting the APR in digital form (WORD or PDF), attach a PDF copy of the data tables along with the digital submission; the icon to download the data tables as a PDF is in the upper right of the screen, just above the data tables.

**Analyze the program’s ARPD data for the review period.**

Describe, discuss, and provide context for the data, including the program’s health scores in the following categories:

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demand</td>
<td>This category is rated as Healthy due to there being enough new jobs available for the number of students graduating. The number of jobs is not completely accurate because it is only looking at one occupational code when in reality students are getting jobs in multiple areas. It also does not take into account contractor or telecommuting jobs where the student lives on the island but works remotely at a company located elsewhere. This also does not represent those students getting jobs in another location.</td>
</tr>
<tr>
<td>Efficiency</td>
<td>This category is rated as Cautionary due to an average class size of 11.8. This number will grow as our new cohort has higher numbers. The number will never be very high due to the constraints of the number of computers and other equipment available for lab classes.</td>
</tr>
<tr>
<td>Category</td>
<td>Description</td>
</tr>
<tr>
<td>---------------------------------------</td>
<td>-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Effectiveness</td>
<td>This category is rated as Healthy due to the number of graduates completing the program. This shows the strength of the program even though, as an AS degree program, the courses are academically rigorous. We will continue to be effective while maintaining high standards to keep a good reputation for potential employers.</td>
</tr>
<tr>
<td>Overall Health</td>
<td>The overall health is rated as Healthy. We will continue to improve the overall health by working on retention and efficiency.</td>
</tr>
<tr>
<td>Distance Education</td>
<td>N/A</td>
</tr>
<tr>
<td>Perkins Core Indicators (if applicable)</td>
<td>This category was not met for all areas. 1P1, however, increased by almost 20 percent from the previous year. 2P1, 3P1, and 4P1 were all down from the previous year and will be reviewed by the new program faculty. Both 5P1 and 5P2 increased from the previous year.</td>
</tr>
<tr>
<td>Performance Funding Indicators (if applicable)</td>
<td>The program has steadily increased the number of graduates.</td>
</tr>
</tbody>
</table>
| 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. | The program has been working on recruitment efforts, which shows in the increase of new students. There is a limit to the amount of recruiting that can be done due to only one full-time faculty member. Overall enrollments at colleges is down due to a strong economy.  
There is a strong job market for program graduates, but it is not reflected completely in the Demand category due to the use of a single occupational code. |
PROGRAM ACTIVITIES

Report and discuss all major actions and activities that occurred in the program during the review period, including the program’s meaningful accomplishments and successes. Also discuss the challenges or obstacles the program faced in supporting student success and explain what the program did to address those challenges.

For example, discuss:

- Changes to the program’s curriculum due to course additions, deletions, modifications (CRC, Fast Track, GE-designations), and re-sequencing;
- New certificates/degrees;
- Personnel and/or position additions and/or losses;
- Other changes to the program’s operations or services to students.

The new cybersecurity CO (developed under the TAACCCT IV grant) ran for the first time during the review year.

Two new courses were offered, ICS 281 and ICS 282.

The long-time program coordinator and sole full-time tenured faculty member retired at the end of the program year.

PROGRAM WEBSITE

Has the program recently reviewed its website? Please check the box below that best applies and follow through as needed to keep the program’s website up-to-date.

☐ Program faculty/staff have reviewed the website in the past six months, no changes needed.

☐ Program faculty/staff reviewed the website in the past six months and submitted a change request to the College’s webmaster on ________________ (date).

☐ Program faculty/staff recently reviewed the website as a part of the annual program review process, found that revisions are needed, and will submit a change request to College’s webmaster in a timely manner.

Please note that requests for revisions to program websites must be submitted directly to the College’s webmaster at http://hawaii.hawaii.edu/web-developer
PART 2: PROGRAM ACTION PLAN

AY17-18 ACTION PLAN

Provide a detailed narrative discussion of the program’s overall action plan for AY17-18, based on analysis of the Program’s AY16-17 data and the overall results of course learning outcomes assessments conducted during the AY16-17 review period. This Action Plan should identify the program’s specific goals and objectives for AY17-18, and must provide benchmarks or timelines for achieving each goal.

The program will look at ways to increase the majors count and number of graduates to keep the program overall rating as healthy. An action plan item in past years has been to request a second full-time faculty member and this has been added again this year. The final action item is to look at the current program course offerings to see if additions or changes should be made because of the changing and diverse IT job field.

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:
Continue to increase major count and number of graduates.

The number of majors in the program has increased over the last three years. This should be continued to achieve the goal of an average of 20 degrees awarded every year.

By increasing the number of students, it will be possible to increase program offerings, allowing students more flexibility in attaining their academic goals. The expanded course offerings will enhance our ability to meet our PLOs, including: PLO 1, “Plan, develop and implement the hardware, software, and procedural components of a data processing system in a business environment”; PLO 2, “Plan, develop and implement the hardware, software, and procedural components of a data communication system in a business environment”; and PLO 3, “Plan, develop, implement, and document computer programs that meet the data processing requirements of a business organization.”
Action Item 2:

Obtain a second full time faculty member in the IT Program.

This has been requested for a number of years. A second full time faculty member will increase the amount and type of classes offered. This would allow for expanded course offerings which would help us meet PLOs 1, 2, and 3 above.

Action Item 3:

Do further planning on course offerings and the potential need for new courses.

The IT industry is very diverse and constantly changing. New or altered courses may be necessary to meet job demands. Research will be done to look at expanding cybersecurity and programming courses such as website development and app development.

Also in this action item, we will look at moving the program under Liberal Arts and Public Services instead of BEaT. This is the only AS degree in the current division and may be better aligned for four-year transfer pathways in the Liberal Arts and Public Services division.

RESOURCE IMPLICATIONS

NOTE: General “budget asks” are included in the 3-year Comprehensive Review. Budget asks for the following three categories only may be included in the APR: 1) health and safety needs, 2) emergency needs, and/or 3) necessary needs to become compliant with Federal/State laws/regulations.

Provide a brief statement about any implications of or challenges due to the program’s current operating resources.

No budget asks are needed to comply with the allowed categories.

BUDGET ASKS

For budget ask in the allowed categories (see above):
### Describe the needed item(s) in detail.

### Include estimated cost(s) and timeline(s) for procurement.

### Explain how the item(s) aligns with one or more of the strategic initiatives of 2015-2021 Strategic Directions:


### PART 3: 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 AY16-17.

**Evidence of Industry Validation and Participation in Assessment (for CTE programs only)**

Provide documentation that the program has submitted evidence and achieved certification or accreditation (if applicable) from an organization granting certification/accreditation in the program’s industry/profession. If the program/degree/certificate does not have a certifying body, you must submit evidence of the program’s advisory committee’s/board’s recommendations for, approval of, and/or participation in the program’s assessment(s).

**Please attach copy of industry validation for the year under review.**

**Courses Assessed**

List all program courses assessed during AY16-17, including Initial and “Closing the Loop” assessments.

<table>
<thead>
<tr>
<th>Assessed Course Alpha, No., &amp; Title</th>
<th>Semester assessed</th>
<th>CLOs assessed (CLO#s)</th>
<th>PLO alignment (PLO#s)</th>
</tr>
</thead>
</table>
Note: The previous program coordinator has retired and the new coordinator can’t find any assessment data. We will start fresh with assessments for the next time period.

### Assessment Strategies

**For each course assessed in AY16-17 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.

### Expected Levels of Achievement

**For each course assessed in AY16-17 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.”

<table>
<thead>
<tr>
<th>Assessed Course Alpha, No., &amp; Title</th>
<th>Assessed CLO#</th>
<th>Standard for Success</th>
<th>% of Students Expected to Meet Standard</th>
</tr>
</thead>
</table>

### Results of Course Assessments

**For each course assessed in AY16-17 listed above, provide:**

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

### 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.

N/A

Next Steps – ASSESSMENT ACTION PLAN for AY17-18

Describe the program’s intended next steps to improve student learning, based on the program’s overall AY16-17 assessment results.
Include any specific strategies, tactics, activities or plans for improvement to program or course curriculum or instructional strategies, or changes in program or course assessment practices.

Note: The previous program coordinator has retired and the new coordinator can’t find any assessment data. We will start fresh with assessments for the next time period.

The assessments made prior to now were gathered one year prior and assessed the following year at an Advisory Council meeting. Changes will be made to the assessment process to make assessments in the same year.

PART 4: ADDITIONAL DATA

Cost Per SSH (to be provided by Admin)
Please provide the following values used to determine the total fund amount and the cost per SSH for your program:

<table>
<thead>
<tr>
<th>Source of Funding</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Funds</td>
<td>$__________</td>
</tr>
<tr>
<td>Federal Funds</td>
<td>$__________</td>
</tr>
<tr>
<td>Other Funds</td>
<td>$__________</td>
</tr>
<tr>
<td>Tuition and Fees</td>
<td>$__________</td>
</tr>
</tbody>
</table>

External Data*
If your program utilizes external licensures, enter:

Number sitting for an exam ____
Number passed  ____  

*This section applies to NURS only.*