

Hawai'i COMMUNITY COLLEGE
PROGRAM ANNUAL REVIEW REPORT

Carpentry Program

Date: February 17, 2017

**Review Period
July 1, 2015 to June 30, 2016**

Initiator: Harold Fujii
Writer(s): Darryl Vierra, Gene Harada

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

Describe the Program	
<p>Provide the short description as listed in the current catalog.</p>	<p>The Carpentry program allows students to participate in the "foundation-to-finish" experiences necessary to build a basic residential house while completing the required carpentry coursework. Students will graduate from the Carpentry program with the knowledge and experience necessary to begin employment at the entry level in the construction industry, or enter a four-year apprenticeship program. The local Carpenters Union unit awards HawCC carpentry program graduates 400 classroom hours out of 620 that is required for the Apprenticeship program and 1000 work hours out a required 8000 to be classified as a Journeyman Carpenter.</p> <p>The Carpentry Program's five courses are comprehensive in the residential building sector and touches upon the commercial sector in the second semester (Concrete Form Construction). The curriculum is based on preparing students to exit as entry level carpenters. A Model Home is constructed annually and is the program's capstone project (all courses lead up to the construction of the Model Home). The task of constructing an off campus dwelling that conforms to all building codes, and meet industry quality standards is rigorous yet well received by students.</p> <p>The college is currently on the last year of a 5 year contract with the Department of Hawaiian Home Lands which expires on June 30, 2017. A new contract to extend it for another 5 years has already been submitted. Upon completion, the residence is turned over to DHHL and they in turn sell the residence to a qualifying native Hawaiian family for the amount it cost the college to construct it, plus \$100.00 for the lease of the land.</p> <p>Using a capstone project, students will graduate from the Carpentry Program with the knowledge, work ethics, and experience necessary to begin employment at the entry level in the construction industry, or enter a four year Carpenters' Union apprenticeship program. The two year experience will not only include teaching the principles and skills of the trade, but also life skills including critical thinking, leadership, accountability, personal interaction, and cultural/community considerations.</p> <p>Our mission's true worth cannot be replicated by classroom lectures or shop mock-ups. The Model Home provides a realistic, tangible working environment that a carpenter would experience on the job. In accomplishing our mission, we must also consider the current industry trends and try to incorporate pertinent instruction and procedures that expose students to the latest methods/materials. The 2016's Model Home kept on track in offering instruction with an emphasis on sustainability. The Model Home included Energy star rated roofing, thermal radiant barrier, low/no VOC paint, solar water heating, photo-voltaic energy system, Energy Star rated appliances/light bulbs, and carpet made from recycled products. The green initiative gives Students' an important perspective and direction that the construction field is headed toward.</p> <p>The program's five courses include:</p>

	<ol style="list-style-type: none"> 1. Carp20A, Basic Carpentry I: Safety, math and hand tools. 2. Carp21A, Basic Carpentry II: Principles/procedures, power tool/machinery certification, various carpentry/woodworking projects. 3. Carp 22, Concrete Form Construction: Residential and commercial applications. 4. Carp 41, Rough Framing and Exterior Finish: Foundation, concrete slab, framing, trusses, roofing, sheathing. (Model Home) 5. Carp 42, Finishing: Exterior trim, drywall, windows, doors, cabinets/countertops and shelving, interior trim. (Model Home)
Provide and discuss the program's mission (or goals and objectives if no program mission statement is available).	N/A

Comprehensive Review information: Required for ARPD Web Submission

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/	
Year	2014
URL	Carpentry - CARP http://hawaii.hawaii.edu/files/program-unit-review/docs/2014_carp_comprehensive_program_review.pdf

QUANTITATIVE INDICATORS

ARPD Data

Please attach a copy of the program's ARPD data tables and submit with the Program Review document.

a) **If you will be submitting the Program Review document 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

b) **If you will be submitting the Program Review document in digital form, 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 side, just above the data tables.**

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

ANALYSIS OF THE PROGRAM'S DATA

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:

Demand	<p>Per 2015-2016 Review</p> <p>Unhealthy</p> <p>The Demand Health Call is based on declared majors divided by the county of Hawaii's projected New and Replacement Positions. The Number of Majors has decreased since last year and the New and Replacement Positions have also decreased by 50% putting the Demand Health Call as Unhealthy. The program has continued to draw interested applicants applying to be a Carpentry Major, but the availability of possible positions has been reduced by 50%. The program cannot raise the Unhealthy rating to Healthy until the County Prorated estimates are recalculated. The county's estimate doesn't correspond with the programs survey of graduates that have acquired jobs in the construction field.</p>
	<p>Per 2015-2016 Review</p> <p>Healthy</p> <p>The program has consistently filled all of the 16 slots that are available during the 2015-2016 academic year, averaging 13.9 with some students dropping due to the curriculum and the rigors of the program not been what they anticipated it to be. In the succeeding semesters, a few students don't return due to personal or financial issues.</p>

	The program's health follows the benchmarks set forth for Majors/FTE BOR Appointed Faculty, which for 2015-2016 is at 17, which is within the 15-35 range.
Effectiveness	<p>Per 2015-2016 Review</p> <p>Healthy</p> <p>Carpentry majors that have enrolled and still in the major from Fall semester has increased from 83.7% to 94.1% from 2014-2015 to 2015-2016. Students are encouraged to continue the course and earn their certificates or degrees with the opportunity to broaden their knowledge and sharpen their skills by participating in the construction of the annual Model Home. For those that are faced with financial problems, they are encouraged to apply for scholarships, financial aid and grants to help subsidize the cost to come to school. A counselor is brought in to speak to the students on the application process and the importance of submitting it before the due date. Those with personal problems, they are notified that the college has counselors available. The unduplicated degrees/certificates awarded have increased from last year due to former students returning to complete their degree requirements to obtain their AAS degrees.</p>
Overall Health	Overall Program Health: Cautionary
Distance Education	N/A No distance education
Perkins Core Indicators (if applicable)	<p>Per 2015-2016 Review</p> <p>The program has achieved the goals set by the indicators in 2 out of 6 areas.</p>

	<p>Technical skills attainment, Student placement, Nontraditional participation and nontraditional completion are the four indicators that were not met.</p> <p>1P1 We will work with students to assist them in being successful in problematic areas and lessons. Encourage and direct students to seek assistance from tutors.</p> <p>4P1 A number of students opted not to enter the construction trade and ventured into trying another occupation. Will continue to express the rewards and benefits of staying with the trade.</p> <p>5P1 Attend Career Opportunities Expo, visiting schools to recruit non-traditional students. Have more exposure in the intermediate and high schools. Promote the Construction Academy within the schools. Spring 2017</p> <p>5P2 Recruit non-traditional students by educating them on the multiple benefits of the trade including various employment opportunities related to carpentry. Spring 2017</p>
Performance Funding Indicators (if applicable)	N/A
Describe any trends, and any internal and/or external factors that are relevant to understanding the program's data.	N/A
Discuss other strengths and challenges of the program that are relevant to understanding the program's data.	N/A

<p>Analyze the program's IRO data for the year under review. Discuss how data/analysis provided by the Institutional Research Office has been used for program improvement. (For example, how results from CCSSE or IRO research requests have impacted program development.)</p>	
Describe, discuss, and provide context for the data.	N/A
Discuss changes made as a result of the IRO data.	N/A

<p>Report and discuss all major/meaningful actions and activities that occurred in the program during the review period. For example:</p>	
Changes to the program's curriculum due to course additions, deletions, modifications (CRC, Fast Track, GE-designations), and re-sequencing	N/A
New certificates/degrees	N/A

Personnel and position additions and/or losses.	N/A
Other major/meaningful activities, including responses to previous CERC feedback.	N/A

Describe, analyze, and celebrate the program's successes and accomplishments. (For example, <i>more students were retained/graduated OR the program successfully integrated new strategies/technologies.</i>)	
<p>Discuss what the program has been doing well. Are there areas that need to be maintained and strengthened?</p> <p>Please provide evidence if applicable (ex: program data reports, relevant URL links, etc.).</p>	<p>Install URL Links for video!</p>

Describe, analyze, and discuss any challenges and/or obstacles the program has faced.	
Identify and discuss the program's challenges/obstacles.	
Discuss changes and actions taken to address those challenges, and any results of those actions.	
Discuss what still needs to be done in order to successfully meet and overcome these challenges.	

PROGRAM ACTION PLAN

Discuss the program's prior year's (AY14-15) action plan and results.	
Describe the program's action plan from the prior review period and discuss how it was implemented in AY15-16.	Instructors were to address concerns as revealed in course assessments. Minor adjustments were implemented in the assessment by modifying the rubric. Provide a First Aid class
Discuss the results of the action plan and the program's success in achieving its goals.	When the adjustments were initiated there were more positive results in the program achieving its goals. All incoming students are given a First Aid class in their 1 st two semester.

<p>Discuss any challenges the program had in implementing that action plan or achieving its goals.</p>	<p>The only challenges that were noted were that every year we have a different batch of students coming through the program, so what previous challenges we had prior may not apply to the next group of students.</p>
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Did the program review its website during AY15-16? Please check the box below that applies.

- Reviewed website, no changes needed.
- Reviewed website and submitted change request to webmaster on ____ (date)_____.
- Reviewed website and will submit change request to webmaster.

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>

<p>Discuss the program's overall action plan for AY16-17, based on analysis of the Program's data and the overall results of course assessments of student learning outcomes conducted during the AY15-16 review period.</p>	<p>Benchmarks and Timelines for implementation and achievement of goals.</p>
<p>Action Goal 1: Provide a First Aid/CPR/AED class for the 1st year students within the 1st 2 semesters.</p>	<p>Benchmarks/Timelines: Spr 2017</p>
<p>How can this action Goal lead to improvements in student learning and attainment of the program's learning outcomes (PLOs)? It will emphasis the importance of safety to the students, which is part of the Programs Learning Outcome (PLO's)</p>	

Action Goal 2: N/A	Benchmarks/Timelines:
How can this action Goal lead to improvements in student learning and attainment of the program's learning outcomes (PLOs)? N/A	
Action Goal 3: N/A	Benchmarks/Timelines:
How can this action Goal lead to improvements in student learning and attainment of the program's learning outcomes (PLOs)? N/A	

RESOURCE IMPLICATIONS

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

For budget asks in the allowed categories (see above):	
Describe the needed item(s) in detail.	N/A
Include estimated cost(s) and timeline(s) for procurement.	N/A
Explain how the item(s) aligns with one or more of the strategic initiatives of <u>2015-2021 Strategic Directions</u> .	N/A

<http://hawaii.hawaii.edu/sites/default/files/docs/strategic-plan/hawcc-strategic-directions-2015-2021.pdf>

LEARNING OUTCOMES ASSESSMENT

For all parts of this section, please provide information based on CLO (course learning outcomes) assessments conducted in AY 2015-16, and information on the aligned (PLOs) program learning outcomes assessed through those course assessments.

If applicable, please also include information about any PLO assessment projects voluntarily conducted by the program’s faculty/staff.

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 from an organization granting certification in an industry or profession. If the program/degree/certificate does not have a certifying body, you may submit evidence of the program’s advisory committee’s/board’s recommendations for, approval of, and/or participation in assessment(s). **Please attach copy of industry validation for the year under review and submit with the document.**

Evidence of Industry Validation (CTE Programs)

Minutes

Carpentry Advisory Council Meeting

February 19, 2016

The meeting was called to order at 4:10 p.m. by Joel Tanabe.

Present:	Gene Harada	Raymond Kaaihue	Loki Vares
	Joel Tanabe	Sharon Sakamoto	Lehre Vidal
	Darryl Vierra	Craig Takamine	

Introduction: Everyone introduced themselves.

Welcome/Introduction – Joel welcomed and thanked everyone for coming. He explained the purpose and importance of the Advisory Council and noted that a large part of the Program is based on the advice of the Council.

Assessment – Assessment is the best tool we have to identify if we are doing our job.

Joel advised that ACCJC noted that our assessment process is weak. If we lose accreditation, we will lose federal aid. Sixty five percent of our students receive financial aid.

Darryl explained the steps in assessing Carp 21A.

A copy of the Program Learning Outcomes was distributed to everyone. The importance of PLO #5 (“Practice good work ethics and quality workmanship with regard to industry standards”) was discussed. Soft skills, such as being dependable, willingness to learn, and showing initiative, are deemed just as important as trade skills. The Council discussed and re-affirmed that student achievement of learning outcomes meet industry needs for entry-level employment.

Review of Program, Course, and Curriculum- A program review is done every year; comprehensive review every 3 years. Joel explained that the data is not always “right” so we have to explain and justify. For example, being self employed is not considered a “job.” If a program is deemed Unhealthy for several years, it will be reviewed. Some programs lose students in the 4th semester because they are hired by industry. Carpentry students complete their 2 years because they want to work on the Model Home.

Joel reviewed the curriculum and reminded Council to let him know if there is anything new that we should be teaching our students.

Lehre Vidal (second year Carpentry student) shared his personal experience in the Carpentry program including the most challenging and most rewarding. He works for a subcontractor and realizes that everything the instructors told him is true.

Industry Outlook- Sharon stated that the paperwork takes long to process; they have a lot of pending jobs. It is not as busy as it was 5-6 years ago but it is picking up. There are a lot of out-island and out-of-state contractors bidding. Government takes the lowest bid, notwithstanding the final outcome. Craig stated there are a lot of residential improvement and commercial renovations; you have to find a niche. It should be strong for several years. The west side (Waikoloa Village, Kukio, Kohanaiki) is busy. Loki stated they have not seen a decrease in residential sales. A lot of their contractors have multiple jobs; it is steady for now.

Craig hired several of our former students and stated they are good workers, He thanked the instructors for putting out quality workers and individuals. Some are building their own homes. Sharon states that one got his contractor's license.

Miscellaneous – Sharon suggested offering Construction Academy at Kamehameha School. She spoke with students there and they seem interested. A possible contact is former lecturer, Bret Marsh, who teaches drafting there.

Sharon stated that she always receives a lot of applications for the HICA scholarship from the Carpentry students and the quality is good.

Craig stated that HICA is very supportive of HawCC, and he invited the instructors to attend an HICA meeting.

Joel thanked everyone for their support and for attending the meeting.

The meeting adjourned at 5:40 p.m.

Submitted by,

April Nakagawa

Courses Assessed

- List all program courses assessed during AY 2015-16, including those courses for which a follow-up “Closing the Loop” assessment was implemented during the review year.

Assessed Course Alpha, No., & Title	Semester assessed	CLOs assessed (CLO# & text)	CLO-to-PLO alignment (aligned PLO# & text)
Carp 22 Concrete Form Construction	Spring 2016	CLO’s #1, #2, #3, #4, #5	#1 – 1,4,7 #2 – 2,4 #3 – 3,5 #4 – 5,7 #5 – 6,7,8
“Closing the Loop” Assessment Alpha No., & Title	Semester Assessed	CLO Assessed (CLO# & text	CLO-to-PLO Alignment (aligned PLO# & text)
Carp 22 Concrete Form Construction	Spring 2016	CLO #1 Utilize math that is required in Carpentry	PLO #1 Understand and utilize math computations, formulas, and measurements required in the carpentry field PLO#4 – Use appropriate tools, materials/fasteners and current building technology to complete projects. PLO#7 – Synthesize principles, procedures and objectives using critical thinking, appropriate materials, tools/equipment and procedures to construct residential dwelling.

		<p>CLO#2 Identify and distinguish different building materials and fasteners, including sustainable initiatives.</p>	<p>PLO#2 – Understand the properties of wood, its sustainability and how it dictates the fundamental principles and procedures involved in carpentry. PLO#4 –Use appropriate tools, materials/fasteners and current building technology to complete projects.</p>
		<p>CLO#3 Utilize safety practices, personal safety, hand and power tools usage in practical's and construction of the Model Home.</p>	<p>PLO#3 – Demonstrate safe practices concerning, personal safety hand and power tool usage, and all aspects of fabrication/construction. PLO#5 - Practice good work ethics and quality workmanship with regard to industry standards.</p>
		<p>CLO#4 Practice good work ethics and quality workmanship with regards to industry standards.</p>	<p>PLO#5 – Practice good ethics and quality workmanship with regards to industry standards. PLO#7 – Synthesize principles, procedures and objectives using critical thinking, appropriate materials, tools. equipment and procedures to construct</p>

			a residential dwelling.
		<p>CLO#5 Construct the Model Home by interpreting construction plans, applying building code requirements, environmental and cultural sensitivity where applicable.</p>	<p>PLO#6 – Construct projects by interpreting drawings, applying building code requirements where applicable. PLO#7 – Synthesize principle, procedures and objectives using critical thinking, appropriate materials, tools/equipment and procedures to construct a residential dwelling. PLO#8 – Demonstrate awareness of environmental and cultural impacts at the community and global level during planning and construction phases.</p>

Assessment Strategies

For each course assessed in AY 2015-16 listed above, provide a brief description of the assessment strategy, including:	
a description of the type of <u>student work or</u>	There were five artifacts with each artifact consisting of three

<p><u>activity assessed</u> (e.g., research paper, lab report, hula performance, etc.);</p>	<p>students each building a concrete slab on ground forms.</p>
<p>a description of <u>who conducted the assessment</u> (e.g., the faculty member who taught the course, or a group of program faculty, or the program’s advisory council members, etc.);</p>	<p>There were three individuals representing our community. They were; Robert Shirai – President of Island Survey Inc., Advisory Council Member Roy Yamashita – Retired Maintenance Worker, State Harbor Div. Grant Kaa`ua – Construction Academy Instructor</p>
<p>a description of <u>how student artifacts were selected for assessment</u> (did the assessment include summative student work from all students in the course or section, <u>OR</u> were student works selected based on a representative sample of students in each section of the course?);</p>	<p>All individual artifacts were assessed and the assessor questioned each student who worked on the artifact.</p>
<p>a brief discussion of the <u>assessment rubric/scoring guide</u> that identifies criteria/categories and standards.</p>	<p>Each assessor was given a rubric which lists the five CLO’s (Competency) and based on the students response, each artifact was given one of the following rating. Not Proficient, Developing Proficiency, or Proficient</p>

Expected Levels of Achievement

- For each course assessed in AY 2015-16, indicate the benchmark goal for student success for each CLO assessed.
 - example 1: “85% of students will Meet Standard or Exceed Standard for CLO#1”;
 - example 2: “80% of students will attain Competency or Mastery of CLO#4.”

Assessed Course Alpha, No., & Title	Benchmark Goal for Student Success for Each CLO Assessed
Carp 22 Concrete Form Construction	80% of students will Meet Standard or Exceed Standard for CLO#1, #2 85% of students will attain Competency or Mastery of CLO#3,#4,& #5

Results of Course Assessments

For each course assessed in AY 2015-16:	
Provide a <u>description of the summative assessment results</u> in terms of students' attainment of the CLOs and aligned PLOs.	<p>All three of the assessors that assessed the five artifacts, consisting of three students each, summed up that the artifacts that were reviewed utilizing the Carpentry's 22 Course Learning Outcome (CLO), 1 – 5, were rated as Proficient, except one Artifact. Both CLO's #2 & #5 were assessed as Developing Proficient for that lone artifact, primarily as stated by the Assessor. (quote) This group was a little slower, but methodical.</p> <p>It's no surprise that this class was able to be assessed as proficient. During the presentation of the lecture, students would ask questions when they weren't sure of how a form was constructed, how far apart should the diagonal braces be and how to calculate the amount of concrete needed. When questions are asked, it shows their thirst for knowledge.</p>

Other Comments

Include any additional information that will help clarify the program's course assessment results.	
Include comparisons to any applicable College or related UH-System program standards, or to any national standards from industry, professional	N/A

organizations, or accrediting associations.	
Include, if relevant, a summary of student survey results, CCSSE, e-CAFE, graduate-leaver surveys, special studies, or other assessment instruments used that are not discussed elsewhere in this report.	Based on the eCafe survey results for Fall 2016, all 12 questions that were addressed, averaged 70% Strongly agreed. Comments for the following questions were; “What did you like about this course” “I liked how his projects gave us an insight to how the industry works”, “What I like about this course is that I learned a lot of things about construction work and even in real life”, “ I enjoyed the hands on experience and all the feedback he gives us on how to improve our skills”. Any suggestions to improve this course? “None”. Other comments; “this class is great”, “This class is great. Great experience too”.

Next Steps – Assessment Action Plan

Describe the program’s intended next steps to improve student learning, based on the program’s overall AY 2015-16 assessment results. Include any specific strategies, tactics, activities, or plans for instructional change, revisions to assessment practices, and/or increased student support.	
Instructional changes may include, for example, revisions to curriculum, teaching methods, course syllabi, course outlines of record (CORs), and other curricular elements.	For the next assessment period, we plan to implement a change on how our teaching method is presented to the students so they get a better grasp of the instructions that are given to them. Example, provide more practical’s so they can see the application process.
Proposals for program modifications may include, for example, re-sequencing courses across semesters, or re-distribution of teaching resources, etc.	There currently isn’t any need to modify the assessment of this course!
Revisions to assessment strategies or practices may include, for example, revisions to learning outcome statements (CLOs and/or PLOs), department or course assessment rubrics (criteria and/or standards),	Not needed at this time.

development of multi-section/course summative assignments or exams, etc.	
Student support and outreach initiatives may include, for example, wrap-around student services, targeted tutoring and/or mentoring, etc.	Students are notified of the availability of tutors that are provided on campus.

Part VI. Cost Per SSH

Please provide the following values used to determine the total fund amount and the cost per SSH for your program:

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General Funds = \$ _____
 Federal Funds = \$ _____
 Other Funds = \$ _____
 Tuition and Fees = \$ _____

Part VII. External Data

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If your program utilizes external licensures, enter:

Number sitting for an exam _____
 Number passed _____