

HAWAII COMMUNITY COLLEGE PROGRAM REVIEW REPORT

Machine, Welding, and Industrial Mechanics Technologies

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July 1, 2013 to June 30, 2014

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Program/Unit Review at Hawaii Community College is a shared governance responsibility related to strategic planning and quality assurance. It is an important planning tool for the college budget process. Achievement of Program/Unit Outcomes is embedded in this ongoing systematic assessment. Reviewed by a college-wide process, the Program/Unit Reviews are available to the college and community at large to enhance communication and public accountability.

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Program Description

(Official Description from Catalog - then provide more in depth explanation of what this program does, who it serves and generally describe its accomplishments)

This program prepares the student for employment in the metalworking and mechanical/maintenance trades. Employment may be in construction, food processing, manufacturing, utilities, astronomical observatories, or related industries. The job requires good physical health, above average eye/hand coordination, mechanical reasoning, and good form perception and spatial relationship. Job responsibilities may include fabricating, repairing, or maintaining metal products on equipment, buildings, and systems.

The MWIM Tech Program accepts all students from all segments of our community that meet the Community College's open-door requirements. It is an open entry/exit program that serves multiple occupational opportunities in the metal fabrication/welding field. Applicable Certificate of Completion, Certificate of Achievement, and Associate of Applied Science degree will be awarded to graduates.

Science Degrees. With the continued restructuring of this program it will be able to also better service the industrial mechanics, installation, maintenance and repair occupations.

The MWIM Program's has initiated a new compressed curriculum combining existing modules to form larger units of study. This direction will hopefully improve current student interest and entice new students who are seeking a career or looking to upgrade skills in the work place.

3yr Review Report Summary – *If this Program is scheduled for Comprehensive Review, this section must be more robust and detailed explaining changes made to the program in the past 3 years; funding received since last 3 years and results from funding, etc.*

1. Continue to evaluate/assess, modify, new block courses.
2. Assess and link SLO's, PLO's, ILO's with MWIM's Advisory input.

CERC Comments and Feedback --

CERC Comments as listed in most recent Comprehensive Review.

April 2014 CERC Comments:

Part II. Program Effectiveness

Table 1: Description and Alignment with Mission and ILOs

- The writer made a good effort at aligning the program with the college's ILOs and also with aligning the program mission with the college's mission. The narrative could be enhanced by making a bit more of a connection to the college's mission and a closer alignment with the program description in the catalog. Provide examples.
- Section asks for official description from catalog, but the program description in the report does not match the description in the catalog program.
- Provide some student profile information, specifically data related to special student populations such as the number of students that are: nontraditional by age and gender, economically disadvantaged, academically unprepared, and/or Hawaiian students.
- Explain what a "live project" is and which local communities they are serving. An example of a "live project" would be helpful.

Table 2: Progress Report of Previous Goals

- The goals were not clear and need to be spelled out, rather than referring to the AMP. Based on the progress described, the program seems to have made significant progress toward its goals. Evidence of this is not present within the document though. Reference to the AMP is great, but actually writing the goals is much more helpful and clear.
- Only some of the program's AMP goals were reported.

Table 3: Analysis of Strengths and Weaknesses

- The strengths, as stated, were a bit confusing. A more in depth explanation and discussion of strengths would have improved this section. Although the writer seemed to have a good grasp of the weaknesses of the program, these need to be spelled out more clearly. Data on types of jobs available in this field would help.
- With low student enrollment and completion rates, this is a costly program.
- Strengths listed reflect ARPD indicator strengths. Is it possible to find strengths within instructional activities also?
- Program was temporarily stopped out during the 2012-2013 academic year for a redesign of curriculum. The curriculum was completely overhauled. It was converted from modules to block offerings. The new students entered the program in Fall 2013.
- With two instructors now and revised curriculum, students may now enter the program every year.
- Program will be receiving a virtual welder. This will address environmental issues by allowing students repetitive practice without emissions and will cut the cost of consumable supplies (i.e. rods).
- Program faculty has close ties with its advisory council.
- The weaknesses, as stated, were very confusing. An explanation of the problem would have helped to clarify the actual weakness.
- Although the writer seemed to have a good grasp of the weaknesses of the program, these need to be spelled out more clearly.
- In future reports, it would be helpful to provide data on the types of jobs available to graduates of the program.
- The program has low student enrollment and completion rates and the costs of the program/new equipment make this a costly program to run.
- Discussion and analysis of the Perkins Indicator data and more supporting details would have led to a higher score.
- A more in depth explanation and discussion of strengths and weaknesses would have improved and clarified Part II.A.3.

Table 4: Program Learning Outcome Assessment Summary

- Part IIA.4 was incomplete and could have been improved with additional information and details. There needs to be a plan to evaluate any changes to the program, which show how the program is responsive to technological changes as well as changing industrial demands.
- In the next review, be sure to include a plan to evaluate any changes to the program. This is important as it indicates that the program is responsive to changes in technology as well as the ever changing demands of industry.
- Be sure to discuss any changes that were made based on assessment. No matter how well a program is operating, assessment always helps us find ways that we can do things better, smarter, and sometimes more efficiently.
- Five Year Comprehensive Reviews should be a compilation of all of the course and program learning outcomes.
- The PLOs in this review are different from those listed on the HawCC website under Programs and Courses. Which is the correct? If the website is not accurate, work with the web developer to correct it.
- Since the program is in transition, the program instructors might want to consider meeting more frequently-- at least once per semester-- with their Program Advisory Council.
- It might be a good idea to include a list of the Program Advisory Council members as a way of showing industry validation.
- It would be helpful to include a table with the assessment results over the five year review period.

Trends and Other Factors:

- There is no mention of trends and more effort should be spent discussing CCSSE data and how it relates to the MWIM program
- This section appears to contain budgetary requests, rather than a description of industry, national and local trends. Perhaps this section could have been reworded to show that these breaking and outdated pieces of equipment are affecting the recruitment and retention of students. With just the right words, this could have easily fit into this section and could have been titled: "Other Factors Affecting the Program."
- Part of this section should also have been included in weaknesses: "Outdated or old equipment." What is the "system" that needs to be updated to current standards? It sounds like an important requirement for the program, but not enough information was provided for the reader to fully understand.

External Factors:

- There was neither mention nor discussion of external factors. Be sure to cover all aspects of each section.

- This section could include a discussion of the demand for trained professionals in the welding and machining industries.
- Outdated equipment is an issue, but might fit better under weaknesses, rather than in “External Factors.”

Program Effectiveness Overall Recommendations/Comments

- Provide more detail in all sections. Some of the information is vague and the reader has to piece together fragments of information.
- This program has gone through significant program updates and improvements and further discussion of these changes would be helpful.

Part III: Goals and Program Improvement

Table 5: Goals and Alignment

- The program has some well-defined goals; writer did a good job at articulating and planning the goals.
- This section could be greatly improved by including an explanation of how the goals align with the: ILOs, UH System Strategic Plan, Academic Master Plan (AMP), and if there has been any UH System collaboration. Write statements in the explanations, rather than simply using AMP reference numbers.
- This section would have been stronger if there was more explanation provided in each subsection.
- Goal 1 is to acquire the equipment-- Virtual Welder-- in Spring 2014, develop the assessment and rubrics in Fall 2014, and then share it with the MWIM Advisory Council in Spring 2015. When will the students be brought into the instructional piece? This seems to be a bit of a protracted timeline. Perhaps students will learn and use the equipment at the same time that the assessment and rubrics are being developed, but if that is the case, then be sure to mention this in future reviews.
- Goal 2 alignment with ILOs 2 and 3 is not clearly articulated. It isn't necessary to align with more than one ILO, though it helps. The alignment with Native Hawaiian students-- ILO 3-- is weak. Providing more details, or not listing this ILO at all could have strengthened this section.
- In order for the program to continue to grow and be successful, Goal 2-- Update Sheet Metal Lab-- is vital.

Part IV: Justification for Program Existence

- Part IV needs data to substantiate the success of students and for justification of the program's existence. The question asks for a summary of the data over the past 5 years. The statement needs to provide this information and needs more specific details, i.e. number of graduates, rates of employment, etc.
- The program provides a valuable service to the college and community, i.e. it prepares students for entry level machining and welding types of positions, and this also provides a very valuable service to the community. This section could have been strengthened with more detail.

Overall Recommendations:

- Be sure to edit your document for misspelled words and names, (Example: “Joel's last name on cover sheet spelled incorrectly”), grammar, punctuation and subject-verb agreement.
- Artifacts assessed in MACH 26, Lathe II were noted by the assessment team as having a lower quality appearance, even though the artifacts successfully passed the “stress” test. Suggestion was to have students do more training. Instructor needs to figure out a way to offer students more training and provide a discussion about this.
- Make efforts to track students after graduation to determine how many gain relevant employment.

CERC provided recommendations intended as suggestions for improvement. Provide a brief response to the suggestions made. i.e., Were the suggestion(s) valid? What change(s) were made as a result of the suggestion(s)?, etc.

- *If no changes were made at all, write “None.”*
- *If no changes were made during this review period but you plan to in future periods, write “None in 2013-2014 however changes will be made in (AYs) and will be reported in that review.*
- *If no changes were made during this review period but changes were made in previous review periods, write “None in 2013-2014; however changes were made in (AYs).”*

Part I: Quantitative/Qualitative Indicators

A. Annual Report of Program Data (ARPD) Data Grid

Look up ARPD data at:

<http://www.hawaii.edu/offices/cc/arpd/instructional.php?year=2014&action=quantitativeindicators&college=HAW>

Print for convenience since you will need to use information to discuss your Program's indicators.

B. ARPD Data Analysis

Based on the data from the ARPD, analyze the program's strengths and weaknesses in terms of demand, efficiency, and effectiveness.

If this Program is scheduled for Comprehensive Review, analyze program over 3 years.

Demand Health UNHEALTHY	Efficiency Health CAUTIONARY	Effectiveness Health CAUTIONARY
<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 declared majors has fallen since last year but is still considered high for the amount of class openings. Potential applicants may perceive that the construction field has not shown a strong rebound yet (due to the economy) thus shying away from the MWIM field. The number of jobs available (County Prorated) is very low (3), again due to the poor economic situation. Until the construction industry and the economic situation improve, there is very little that the program can do.</p>	<p>The program has been consistent in filling all of the 16 slots that were available during the 2012/2013 year, averaging 8.6. A few students dropped due to the curriculum and rigor of the program not meeting their expectations. However the majority of those that do not persist to succeeding semesters are usually in response to unexpected personal or financial issues.</p>	<p>Successful Completion increased by one percent from the previous year and at 100% validates that the program is successful in retaining students through the two year program. Withdrawals have dropped significantly in two years.</p>

Overall Health
CAUTIONARY

Distance Education: Completely Online Classes -- List and provide an analysis of courses taught completely online. (i.e., compare success to face-to-face; action strategies implemented to increase success and completion rates, e.g., working with ITSO on strategies)

N/A

Perkins IV Core Indicators -- Identify core indicators (1P1, 2P1, 3P1, 4P1, 5P1, 5P2) that were not met and specify action strategies.

The MWIM Program has achieved the goals set by the indicators in 2 out of 6 areas (Technical Skills Attainment, Student Retention or Transfer.) Student Placement is proportionately affected by the job market: last year construction was down. Non-traditional student enrollment is historically low because MWIM is perceived as a male oriented trade. Therefore, Non-traditional Completion may be low as Non-trad students recognize actual or perceived obstacles as they progress through the program. Attracting female students has always been a challenge, especially because of the industry's reluctance to accept them on an equal basis with males. Until this trend ends, we will not see any great improvement in this area.

5P1 The Program will actively promote and recruit non-traditional students with the intent of graduating entry level workers in MWIM related fields.
Each semester.

5P2 Use qualified service people for those with disabilities where applicable.
Each semester.

Performance Funding (Graduation, Native Hawaiian, STEM, Transfer, Degree) -- Describe how your program contributed to performance funding in these areas? If not, why and how do you plan to contribute in the future?

The new virtual welding equipment/trainer will hopefully raise the Program's Performance Funding Data. The additional practice time on a virtual welder will benefit students, environment, and workforce. The students will have additional nomenclature and industry terms repeated continuously. The environment will see reduced welding fumes and the workforce will have a more productive and informed worker. We believe the Number of Degrees and Certificates, Number of Degrees and Certificates Native Hawaiian, and Number of Pell Recipients will increase.

C. Trends & Other Factors -- Describe trends including comparisons to any applicable standards, such as college, program, or national standards from accrediting associations, etc. Include, if relevant, a summary of Satisfaction Survey Results, special studies and/or instruments used, e.g., CCSSE, etc. Describe any external factors affecting this program or additional program changes not included elsewhere.

The last CCSSE results shows the colleges student satisfaction above the national benchmarks. The Program has consistently participated in the survey with positive results. However, the existing Multiple Operator Weld Source is obsolete (1989). The system needs to be updated to the current standards. Also, the GTAW power source and the Oxy/Acet Manifold for welding, brazing, and cutting needs updating. These replacement equipments are crucial minimum requirements for the Program to maintain industry standards. Should the current welding system fail, two banks (20 welding booths) will become unusable causing student dissatisfaction.

Part II: Analysis of the Program

A. Alignment with Institutional Mission & Learning Outcomes (ILOs)

1) College Mission Alignment

Hawai`i Community College (HawCC) promotes student learning by embracing our unique Hawai`i Island culture and inspiring growth in the spirit of “E`Imi Pono.” Aligned with the UH Community Colleges system’s mission, we are committed to serving all segments of our Hawai`i Island community.

Copy/Paste from your 2012-2013 Program Review, your description of how this Program supports the College’s Mission. Review and revise as you feel necessary. The description you finalize in the field below will be input into PATH for future reports.

Example: The SUBS program’s faculty and staff fosters excellence in education, workforce development, academic advising and co-curricular activities that focus on engaging, challenging and transforming students to strive for academic excellence, personal growth, contributing members of the Hawai`i Island Community.

Last Modified on: 10-14-2013

The MWIM Program welcomes all segments of our Hawai`i island community including nontraditional students (gender and age), those with physical disabilities, and the general public, no matter their social economic standing, religion, ethnicity or sexual orientation. The Program has continually enrolled Native Hawaiian students and women who have become productive and engaged citizens in the community.

2) ILO Alignment

a) ILO1: *Our graduates will be able to communicate effectively in a variety of situations.*

Copy/Paste from your 2012-2013 Program Review, your description of how this Program supports this ILO. Review and revise as you feel necessary. The description you finalize in the field below will be input into PATH for future reports. If Program doesn’t support this ILO, write “No alignment to ILO1”

Example: The SUBS program’s curriculum prepares our graduates to communicate effectively by requiring the students to participate in: 1) small and large group discussions, both online and face-to-face; 2) individual and group presentations; 3) role play of interviewing and counseling skills; 3) fieldwork at practicum sites; 4) service learning activities on campus and in the greater community.

Last Modified on: 10-14-2013

In addition to our regular course of study, all students seeking our CA and/or AAS degrees are required to pass at least the colleges Eng 197 class. (See Eng 21 course description). Additionally, the rigors of program includes in every course terms and nomenclature specific to their chosen course of study. As in most trades, effective communication with the instructor and fellow students/team members are imperative to successfully meet goals and objectives.

b) ILO2: *Our graduates will be able to gather, evaluate and analyze ideas and information to use in overcoming challenges, solving problems and making decisions.*

Copy/Paste from your 2012-2013 Program Review, your description of how this Program supports this ILO. Review and revise as you feel necessary. The description you finalize in the field below will be input into PATH for future reports. If Program doesn’t support this ILO, write “No alignment to ILO2”

Last Modified on: 10-14-2013

Many assignments in the Program require the students to access information through the internet, their text, and library research. The challenge of problem solving to make informed decisions on classroom and shop

tasks relies on their research, past experiences, and instruction.

c) **ILO3:** *Our graduates will develop the knowledge, skills and values to make contributions to our community in a manner that respects diversity and Hawaiian culture.*

Copy/Paste from your 2012-2013 Program Review, your description of how this Program supports this ILO. Review and revise as you feel necessary. The description you finalize in the field below will be input into PATH for future reports. If Program doesn't support this ILO, write "No alignment to ILO3"

Last Modified on: 10-14-2013

Annual Program Review 2013 3 last updated: 2013-10-14 The Program has continually contributed to the community in the form of "live projects". We carefully screen these projects to coincide with our current course work and prioritize the scheduling if the "live project" helps our local native Hawaiian community.

B. Program Mission – Write Official Program Mission

The MWIM Program will provide the knowledge, and teach skills required for the entry level machine, welding and industrial mechanics occupations. The program will also instill good work ethics, a positive attitude, and accountability that will make him/her EMPLOYABLE in a variety of related industries as well as basic preparation to enter any employment field.

C. Strengths and Weaknesses

1) Strengths (Top 3 defined)

State Strength	Using supporting evidence, describe why this is a strength
<i>Example: Program Curriculum</i>	<i>Example: 1) Approved by the State Department of Health as meeting the addictions requirements for Certified Substance Abuse Counseling, and Certified Prevention Specialist educational requirements. 2) STEM Courses - SUBS 132, 268, 270 3) Contains sufficient SUBS core requirement courses to develop an AA Degree in SUBS 4) Indigenous course - SUBS 141 Ho`oponopono</i>
S1. Native Hawaiian enrollment although lower than last year, continues to be proportionately high.	ARDP Demand indicator 3a. Further involvement with the DOE, KSBE, and our counseling staff to increase recruitment.
S2. Successfully collapsed multiple modular courses into larger block type courses.	This program modification presents an effective and better defined transition between the three components of MWIM. Students will receive comprehensive instruction in an orderly and logical manner.
S3. Successful Completion (Equivalent C or Higher	ARDP Effectiveness Indicator 17.

2) Weaknesses (Top 3 defined)

State Weakness	Using supporting evidence, describe why this is a Weakness	Proposed solution
<i>Example: Lacks 2-year Degree Program</i>	<i>Example: Does not meet HawCC AMP Priorities (pp 5-10): Increasing Graduates in Science, Technology, Engineering and Math (STEM).</i>	<i>Example: Proposal being made for New AMP Action Strategies that would allow and support the addition of a 2-yr Degree Program for SUBS.</i>
W1. New and Replacement Positions (County Prorated)	ARDP Demand Indicator 2. The weak economy and poor construction industry has contributed to the low position availability. The MWIM Program is the only program of its kind in the State. Therefore, we are investigating the possibility of addressing the positions at the state level including the Astronomy community.	
W2. FTE Enrollment in Program Classes	The Program did not accept new students in the Fall 2011 semester. This was the cause of the lower student count. Also, one instructor position was eliminated in Fall 2011.	
W3. Perkins IV Core Indicators. 2P1, 4P1, 5P1, and 5P2 were not met.	Four of the six indicators were "not met" because of the stop out in Fall 2011, the struggling economy and construction industry, industry reluctance to accept females on an equal basis with males, until this trend ends we will not see any improvement.	

Part III: Course/Program Assessment

A. Course(s) Assessed -- List the course(s) (Alpha/#) assessed during this reporting period.

<p><i>Example:</i> Courses: SUBS 140, 245, 268 PLO#1: Satisfy the addiction studies educational requirements for Hawaii State Department of Health Alcohol and Drug Division 's (ADAD) Certification: Embedded in PLO#1 are PLO 's 2, 3, 4, & 5</p>
Mach 26

B. Expected Level of Achievement -- Describe the different levels of achievement for each characteristic of the learning outcome(s) that were assessed. That represented "excellent," "good," "fair," or "poor" performance using a defined rubric and what percentages were set as goals for student success; i.e. 85% of students will achieve good or excellent in the assessed activity."

The expected performance level: 80% of the students will achieve Good or Excellent as stated in the rubric
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C. Assessment Strateg(y/ies) & Instrument(s) -- Describe what, why, where, when, and from whom assessment artifacts were collected.

<p><i>Example:</i> SAMPLING: College records for seven (all) 2009 program graduates</p>
Strategy/Instrument 2:
Strategy/Instrument 3:
Strategy/Instrument 4:

D. Results of Course Assessment - Provide a summary of assessment results.

<p><i>Example:</i> RESULTS: 86% (6/7) program graduates met or exceeded expectations: completed SUBS 140,245, 268 with a "C" grade or better. 1/7 students received an incomplete grade.</p>
100% of the artifacts were excellent or good based on the rubric's criteria.
Following the evaluations the assessment team discussed the effectiveness of the rubric and agreed it is an effective instrument for evaluating this assignment.

Changes Implemented as a result of Assessment	Evaluation of the changes that were implemented
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Change 1:	Evaluation of Change 1:
Change 2:	Evaluation of Change 2:

E. Next Steps -- *Based on your experience with Assessment so far, what do you plan to do in the future? Include any changes that are planned for the Program as a result of course assessments. For example, changes to rubrics, changes to level of expectation, any Program and/or curriculum modifications, etc.*

Though the assessors were in agreement using the provided rubric, in scoring all of the artifacts at the proficient level, the program will continue to be cognizant to any concerns to ensure that objectives are being met.

F. Evidence of Industry Validation for CTE Programs -- *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, the recommendations for, approval of, and/or participation in, assessment by the program's advisory council can be submitted. Describe the documentation; i.e. 9/27/2013 Minutes of ACC Advisory Council; Completed Rubrics by Advisory Council Members.*

The Program has an advisory team comprised of the program faculty, members of the community employed in the machine and weld industry and, when possible, graduates of the program. The advisory team meets annually.

Part IV Action Plan

A. 20% Course Review

a) **Courses Reviewed** -- List the Course Alpha/Number and Course Title of courses that were reviewed in AY 2013-2014.

Course Alpha Number	Course Title
MWIM 42	INTRODUCTION TO MACHINE AND WELDING
MWIM 45	INTRODUCTION TO ARC WELDING
MWIM 52	SHEET METAL AND MACHINING
MWIM 55	INTERMEDIATE WELDING AND QUALIFICATION PROCEDURES
MWIM 62	LATHE FACING AND KNURLING
MWIM 65	ADVANCED WELDING
MWIM 72	INTRODUCTION TO CNC MILLING
MWIM 75	SPECIAL PROCESS WELDING & RIGGING

b) 20% Course Review Schedule

Input the Program's 20% Course Review Schedule for the next 5 years. If a schedule cannot be located, refer to HAW 5.250 Course Review Policy (<http://hawaii.hawaii.edu/ovcadmin/admin-manual/haw5-250.pdf>) to create a new schedule.

Course Alpha Number	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019
MWIM 42 - INTRODUCTION TO MACHINE AND WELDING	Fall	X	X	X	X
MWIM 45 - INTRODUCTION TO ARC WELDING	Fall	X	X	X	X
MWIM 52 - SHEET METAL AND MACHINING	Spring	X	X	X	X
MWIM 55 - INTERMEDIATE WELDING AND QUALIFICATION PROCEDURES	Spring	X	X	X	X
MWIM 62 - LATHE FACING AND KNURLING	Fall	X	X	X	X
MWIM 65 - ADVANCED WELDING	Fall	X	X	X	X
MWIM 72 - INTRODUCTION TO CNC MILLING	Spring	X	X	X	X
MWIM 75 - SPECIAL PROCESS WELDING & RIGGING	Spring	X	X	X	X

B. Previous Goals (Program Actions) & Planning

All previous goals from last year's report are used to update the program actions in the Academic Master Plan (AMP) Appendix.

- List and discuss all program actions listed for your program in the AMP Appendix, not including crossed out items. (<http://hawaii.hawaii.edu/docs/academic-master-plan-appendix-priority-actions.pdf>)
- Review and specify which program actions were addressed or completed during Review Period AY 2013-2014.
- Give a progress report for each program action that is not yet address/completed and describe the degree to which the goal was achieved over the review period.
- Specify program actions that are no longer being pursued by the program and should be deleted from the AMP.

AMP Program Actions	Progress Evaluation & Evidence of Achievement
<i>Example:</i> 26.1 2009-2010: Recruit and Hire New SUBS -- FTE BOR Appointed Faculty	<i>Example:</i> The CERC and HawCC administration approved new faculty position for program, which was submitted to UH system. However, this writer was informed that the position request got "lost" in the UH system, and therefore never forwarded to the State legislature for approval.
AMP 22.1 Revise program learning outcomes to be validated by industry.	Completed. Will review all modules and review or add topics/objectives as applicable.
AMP 22.2 Develop industrial mechanics curriculum and submit to CRC.	Submitted to CRC and passed.
AMP 22.3 Institute industrial mechanics course offerings.	Done and running for first year students.
AMP 22.4 Expand course offerings as equipment/trainers become available.	Have expanded course offerings to include industrial mechanics
AMP 22.5 Continuously evaluate/modify MWIM curriculum.	In progress.
AMP 22.6 Continuously communicate with industry partners.	In progress.

C. New Goals (Action Strategies) and Alignment – Describe New Goals, if any

Define Goal (Action Strategy) 1

<i>Example: Establish AA Degree in SUBS</i>
Implementation of virtual welder trainer.

Alignment of Goal 1 to ILO(s)

Explain how Goal 1 aligns with ILO(s) and provide supporting rationale
Example: Goal 1 aligns with ILO2 (Critical Thinking) by ... Goal 1 aligns with ILO3 (Community contribution) by ...
ILO1
ILO2

Alignment of Goal 1 to Strategic Plan (SP)

http://hawaii.hawaii.edu/docs/HawCCStrategicPlan_2008-2015_10-29-09.pdf

Explain how Goal 1 aligns with an Action Strategy in the Strategic Plan (SP). Include SP Reference(s) and provide supporting rationale. If Goal 1 does not align with a listed strategy, explain how it aligns to a SP Performance measure. Then, propose a new action strategy in the next field.

Examples:

Goal 1 aligns with SP Action Strategy A1.1.c Increase Native Hawaiian enrollment by 3% per year particularly in regions that are underserved) by ...

Goal 1 does not align to a listed strategy, but aligns with SP Performance Measure A1.1 (Increase Native Hawaiian enrollment by 3% per year particularly in regions that are underserved) by ...

A1.1a. Assess the needs and numbers (by age) of Native Hawaiian residents and growth patterns in targeted districts through agencies such as community health organizations, the DOE & KSBE

B2.c. Seek funding for specialized program and student needs identified by survey

C1.a. Establish a grants writing and management office to increase UH extramural fund support

Proposed New SP Action Strategy/Strategies (if applicable) – *If Goal 1 does not align with a listed HawCC Action Strategy, indicate above how it aligns with a Performance Measure, and then use the field below to propose a new Action Strategy to be added to the HawCC Strategic Plan. New action strategies should be written in generalized terms so that other Programs and Units could also align their goals to them in the future.*

The virtual welder will offer students a training aid which eliminates the anxiety of the fusion process and prepare them for the actual skill set. Immediate assessment informs the instructor and student of progress in multiple applications. It is a low cost, environmentally and user safe training tool, accepted by the industry.

Alignment of Goal 1 to Academic Master Plan (AMP)

Academic Master Plan: http://hawaii.hawaii.edu/docs/HawCCStrategicPlan_2008-2015_10-29-09.pdf

AMP Appendix: <http://hawaii.hawaii.edu/docs/academic-master-plan-appendix-priority-actions.pdf>

Indicate which Academic Master Plan (AMP) Action Priorities Goal 1 aligns with and provide supporting reasoning.

	STEM	Graduation Remediation Workforce	Student Transfer	Underserved Populations	Green Curricula	Program Development
<i>Example: Establishing an AA Degree in SUBS will increase the number of STEM Degree programs at HawCC and meet the Workforce push for more STEM graduates.</i>	X	X				X
Implementation of virtual welder trainer.		X			X	X

UH System Collaboration (if applicable)

- Include collaboration efforts w/other campuses.
- Include alignment with the UHCC Initiatives <http://uhcc.hawaii.edu/OVPCC/> (listed on the left of John Morton's picture).

Example: There is dialogue among MauiCC, KauaiCC, and HawaiiCC to establish a common AA Degree in SUBS.

Calendar of planned activities for Goal 1 -- *In chronological order, briefly describe the procedures/activities planned to achieve Goal 1*

Activity	When will the activity take place
<i>Example:</i> Collaborating with other CCs complete SUBS AA Degree Authorization to Plan (AtP)	<i>Example:</i> Fall 2015
Virtual Welder acquisition	Spring 2014
Program Develop/Create rubrics and assessment.	Fall 2014
Introduce equipment and assessment to the Advisory Committee.	Spring 2015

Define Goal (Action Strategy) 2

Update/redo sheet metal lab. Replace 60 year old equipment as required.

Alignment of Goal 2 to ILO(s)

ILO 2
ILO 3

Alignment of Goal 2 to Strategic Plan (SP)

http://hawaii.hawaii.edu/docs/HawCCStrategicPlan_2008-2015_10-29-09.pdf

Explain how Goal 2 aligns with an Action Strategy in the Strategic Plan (SP). Include SP Reference(s) and provide supporting rationale. If Goal 2 does not align with a listed strategy, explain how it aligns to a SP Performance measure. Then, propose a new action strategy in the next field.

- A1.3e. Utilize the program review process to evaluate Native Hawaiian developmental education enrollment and completion to determine effectiveness
- B1.g. Seek opportunities to infuse cultural/global awareness into curriculum
- B2.c. Seek funding for specialized program and student needs identified by survey

Proposed New SP Action Strategy/Strategies (if applicable) – *If Goal 2 does not align with a listed HawCC Action Strategy, indicate above how it aligns with a Performance Measure, and then use the field below to propose a new Action Strategy to be added to the HawCC Strategic Plan. New action strategies should be written in generalized terms so that other Programs and Units could also align their goals to them in the future.*

1. The sheet metal fabrication skills are utilized through numerous applications. Though the HVAC field provides the greatest opportunities for SM workers, many specialty metal working shops requires the skill. The MWIM program attracts older students that may have had experiences in another field with a desire to include the sheet metal segment to their skill sets.

2. Sheet metal knowledge and skills is a solid fit within the MWIM program, thus requiring sufficiently capable equipment and tooling.

3. MWIM's enrollment typically consists of a large number of native Hawaiians. With a well rounded metal trade degree/certificate achieved, they have a better chance of obtaining employment.

Alignment of Goal 2 to Academic Master Plan (AMP)

Academic Master Plan: http://hawaii.hawaii.edu/docs/HawCCStrategicPlan_2008-2015_10-29-09.pdf

AMP Appendix: <http://hawaii.hawaii.edu/docs/academic-master-plan-appendix-priority-actions.pdf>

Indicate which Academic Master Plan (AMP) Action Priorities Goal 2 aligns with and provide supporting reasoning.						
	STEM	Graduation Remediation Workforce	Student Transfer	Underserved Populations	Green Curricula	Program Development
Update/redo sheet metal lab. Replace 60 year old equipment as required.		X				

UH System Collaboration (if applicable) –

- Include collaboration efforts w/other campuses.
- Include alignment with the UHCC Initiatives <http://uhcc.hawaii.edu/OVPCC/> (listed on the left of John Morton's picture).

Calendar of planned activities for Goal 2 -- In chronological order, briefly describe the procedures/activities planned to achieve Goal 2

Activity	When will the activity take place
Secure funding	Spring 2015
Secure equipment	Fall 2015-Spring 2016
Assess	Fall 2016

Define Goal (Action Strategy) 3

Expand Machining curriculum by adding new CNC technologies and generally updating methods consistent with the industry.

Alignment of Goal 3 to ILO(s)

ILO 2
ILO 3

Alignment of Goal 3 to Strategic Plan (SP)

http://hawaii.hawaii.edu/docs/HawCCStrategicPlan_2008-2015_10-29-09.pdf

Explain how Goal 3 aligns with an Action Strategy in the Strategic Plan (SP). Include SP Reference(s) and provide supporting rationale. If Goal 3 does not align with a listed strategy, explain how it aligns to a SP Performance measure. Then, propose a new action strategy in the next field.

A1.3e. Utilize the program review process to evaluate Native Hawaiian developmental education enrollment and completion to determine effectiveness

B1.g. Seek opportunities to infuse cultural/global awareness into curriculum

B2.c. Seek funding for specialized program and student needs identified by survey

Proposed New SP Action Strategy/Strategies (if applicable) – *If Goal 3 does not align with a listed HawCC Action Strategy, indicate above how it aligns with a Performance Measure, and then use the field below to propose a new Action Strategy to be added to the HawCC Strategic Plan. New action strategies should be written in generalized terms so that other Programs and Units could also align their goals to them in the future.*

1. CNC machining is now the basis for many machining operations. Students success to program these machines will largely depend on appropriate trainers and equipment.

2. CNC machining/milling needs to represent a larger part of the curriculum.

3. A graduate of MWIM (in the machining sector), should be trained at the level of an operator.

Alignment of Goal 3 to Academic Master Plan (AMP)

Academic Master Plan: http://hawaii.hawaii.edu/docs/HawCCStrategicPlan_2008-2015_10-29-09.pdf

AMP Appendix: <http://hawaii.hawaii.edu/docs/academic-master-plan-appendix-priority-actions.pdf>

Indicate which Academic Master Plan (AMP) Action Priorities Goal 3 aligns with and provide supporting reasoning.

	STEM	Graduation Remediation Workforce	Student Transfer	Underserved Populations	Green Curricula	Program Development
Update/redo sheet metal lab. Replace 60 year old equipment as required.		X				X

UH System Collaboration (if applicable) –

- Include collaboration efforts w/other campuses.
- Include alignment with the UHCC Initiatives <http://uhcc.hawaii.edu/OVPCC/> (listed on the left of John Morton's picture).

Calendar of planned activities for Goal 3 - In chronological order, briefly describe the procedures/activities planned to achieve Goal 3

Activity	When will the activity take place
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Secure funding	Spring 2015
Secure equipment	Fall 2015-Spring 2016
Assess	Fall 2016

Part V: Resource Implications

A. Cost Item 1

Description	Type <ul style="list-style-type: none"> ● Personnel ● Facilities ● Equipment ● Health/Safety ● Others (Define) 	Estimated Cost
Virtual Welder	Equipment	\$85,000

Alignment of Cost Item 1 to Strategic Plan (SP)

Explain how Cost Item 1 aligns with the Strategic Plan (SP). Include SP Reference(s) and provide supporting rationale
Example: Cost Item 1 aligns with SP A1.1 (Increase Native Hawaiian enrollment by 3% per year particularly in regions that are underserved.) by ...
B2.c. Seek funding for specialized program and student needs identified by survey

Alignment of Cost Item 1 to Academic Master Plan (AMP)

Explain how Cost Item 1 aligns with the Academic Master Plan (AMP) Action Priorities.
Example: Cost Item 1 aligns with Action Priority STEM because an instructor is necessary to develop the program.
22.4 Expand course offerings as equipment/trainers become available.

Alignment of Cost Item 1 to Strength(s)

Explain how Cost Item 1 aligns with program Strength (From Part II. Section C). Address and provide supporting rationale. If there's no alignment, write "No Alignment."
Example: No Alignment
S3. Successful Completion (Equivalent C or Higher) Introduce students to welding with a safe, non-threatening trainer. Gain objective assessment immediately. Newest green technology to reduce toxic fumes in welding booths. Reduce the cost of consumables.

Alignment of Cost Item 1 to Weaknesses(s)

Explain how Cost Item 1 aligns with Weakness (From Part II. Section C). Address and provide supporting rationale. If there's no alignment, write "No Alignment."
W3. Perkins IV Core Indicators. 2P1, 4P1, 5P1, and 5P2 were not met.

B. Cost Item 2

Description	Type <ul style="list-style-type: none"> ● Personnel ● Facilities ● Equipment ● Health/Safety ● Others (Define) 	Estimated Cost
Update Sheet Metal Lab	Equipment	100,000

Alignment of Cost Item 2 to Strategic Plan (SP)

Explain how Cost Item 2 aligns with the Strategic Plan (SP). Include SP Reference(s) and provide supporting rationale
B2.c. Seek funding for specialized program and student needs identified by survey

Alignment of Cost Item 2 to Academic Master Plan (AMP)

Explain how Cost Item 2 aligns with the Academic Master Plan (AMP) Action Priorities.
22.1 Revise program learning outcomes to be validated by industry.

Alignment of Cost Item 2 to Strength(s)

Explain how Cost Item 2 aligns with program Strength (From Part II. Section C). Address and provide supporting rationale. If there's no alignment, write "No Alignment."
S1. Native Hawaiian enrollment although lower than last year, continues to be proportionately high.

Alignment of Cost Item 2 to Weaknesses(s)

Explain how Cost Item 2 aligns with Weakness (From Part II. Section C). Address and provide supporting rationale. If there's no alignment, write "No Alignment."
W1. New and Replacement Positions (County Prorated) To meet industry standards basic knowledge and strengthen student graduation rates.

C. Cost Item 3

Description	Type <ul style="list-style-type: none"> ● Personnel ● Facilities ● Equipment ● Health/Safety ● Others (Define) 	Estimated Cost
Update machining lab with equipment and trainers.	Equipment	250,000

Alignment of Cost Item 3 to Strategic Plan (SP)

Explain how Cost Item 3 aligns with the Strategic Plan (SP). Include SP Reference(s) and provide supporting rationale

B2.c. Seek funding for specialized program and student needs identified by survey

Alignment of Cost Item 3 to Academic Master Plan (AMP)

Explain how Cost Item 3 aligns with the Academic Master Plan (AMP) Action Priorities.

22.6 Continuously communicate with industry partners.

Alignment of Cost Item 3 to Strength(s)

Explain how Cost Item 3 aligns with program Strength (From Part II. Section C). Address and provide supporting rationale. If there's no alignment, write "No Alignment."

S1. Native Hawaiian enrollment although lower than last year, continues to be proportionately high.

Alignment of Cost Item 3 to Weaknesses(s)

Explain how Cost Item 3 aligns with Weakness (From Part II. Section C). Address and provide supporting rationale. If there's no alignment, write "No Alignment."

W1. New and Replacement Positions (County Prorated)

The Advisory Council has suggested the program update these equipment to accommodate the astronomy community as well as global needs.

Part VI: Justification for Program Existence

Write a brief statement describing the value of this Program to the College. Is your Program sustainable? If so, briefly state why. If not, briefly state why the College should continue to keep your Program open.

(Sources include Industry Validation, ARPD Data Validation, Trends and Other Factors.)