Program Review Report

Yuba Community College District

YC - Manufacturing & Welding Technology Program Recommendations

Program Description: The Welding and Manufacturing Departments at Yuba College prepare students for entry into the workforce as welders and operators. The welding program has expanded to about 350 students a year in the program and has a need for expanding the Manufacturing Program which has been without a full time instructor for 4 years. Students need these courses to complete their degrees and certificates. The Welding department also has a need for another full time Welding instructor.

Year of Review: 2012-2013

Type of Review: Self-Study (4-year review)

Executive Summary: The Welding department has done research on the needs of employers in our area and nationally for the welders exiting our program. We want our students to be highly competitive on the local and national level. The Welding department has expanded and improved the equipment and offerings for our students to gain experience, but needs to continue to improve to meets the needs of an ever changing industry. The Manufacturing Program is in need of a full time instructor to meet the needs of industry and to give our students the experience in manufacturing that will ensure that they will be even more competitive. Yuba College is one of the only manufacturing programs left in Northern California.
As evidenced in the last educational master plan for Yuba College, the welding program has lost 3 of 4 full time instructors, but has seen an incredible transformation in offerings and the number of students.
The welding program also had the first ever articulated transfer between a Weld-Ed school and a four year institution, Weber State in Utah. Dan Turner also represented the college at the International Institute of Welding Conference in Denver, and also the International welding education conference in Germany. He was the only representative for an American College.

Future Goals and Program Direction: The Welding program is trying to expand the fabrication portion of the program and add an advanced welder operator program to meet the needs of an ever changing industry. We have listened to our advisory committee and participated in several symposiums on the needs of the welding industry and have seen several themes; fabrication, GTAW, blueprint reading, certification and experience with automated equipment.

Curriculum & SLO Assessment Summary : Creating SLO's for the welding classes and entering them into Curricunet.

Recommendations	Plans of Action & Budgetary Impact / Tasks	Status	Feedback & Follow-Up
YC - Manufacturing & Welding Technology Program Recommendations - Hire a Full-time Manufacturing Instructor - Hire a Full-time Manufacturing Instructor **Year(s) Requested:** 2011-2012 **Recommendation Priority:** 3. High Priority	**Plan of Action:** Forward request to Faculty Staffing Committee **Type:** Staffing - Faculty **Budgetary Impact:** Cost of Instructor and Benefits		
YC - Manufacturing & Welding Technology Program Recommendations - Hire a full			

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time welding instructor - Hire a full time welding instructor to accommodate the students need for classes in an expanding program. **Year(s) Requested:** 2011-2012 **Request Date:** 01/26/2012 **Recommendation Priority:** 3. High Priority **Supporting Evidence (SLO, WSCH, etc.):** We cannot accommodate all of the students wishing to take welding courses.			
YC - Manufacturing & Welding Technology Program Recommendations - Upgrade ventilation System - Expand existing ventilation system and and new systems for the plasma pipe bevel machine and the CNC plasma table **Request Date:** 02/01/2012 **Recommendation Priority:** 3. High Priority **Supporting Evidence (SLO, WSCH, etc.):** The expansion of the program has led to the purchase of new equipment and needs for more booths for the students to weld and cut safely.	**Plan of Action:** Detail plans for new system, retrieve bids, and install **Type:** Facilities **Budgetary Impact:** To be determined **Perkins Eligible:** Yes		
YC - Manufacturing & Welding Technology Program Recommendations - Expand the Fabrication Program and form a fabrication certificate - Purchase tools for the fabrication program; Hossfeld bender, dies for Ercolina tubing bender, sharpen blades for shears, pipe stands, feed-in and feed-out tables **Year(s) Requested:** 2011-2012 **Request Date:**	**Plan of Action:** Submit proposal to Perkin's committee **Type:** Equipment/Technology **Budgetary Impact:** 50-70,000$ **Perkins Eligible:** Yes		

Recommendations	Plans of Action & Budgetary Impact / Tasks	Status	Feedback & Follow-Up
01/26/2012 **Recommendation Priority:** 3. High Priority **Supporting Evidence (SLO, WSCH, etc.):** Employers are asking for employees trained in how to use equipment safely and efficiently.			
YC - Manufacturing & Welding Technology Program Recommendations - Institute a new GTAW program - Purchase new GTAW inverter machines **Year(s) Requested:** 2011-2012 **Request Date:** 02/02/2012 **Recommendation Priority:** 3. High Priority **Supporting Evidence (SLO, WSCH, etc.):** students need certification to compete in the marketplace, pipe welding is a need in the industry according to the ASME code which uses GTAW for the root pass.	**Plan of Action:** Present plan to the Perkins committee **Type:** Equipment/Technology **Budgetary Impact:** 65000$ **Perkins Eligible:** Yes		
YC - Manufacturing & Welding Technology Program Recommendations - Expand Shielding Gas manifold, add a gas mixing system, add a natural gas pump - Expanding the shielding gas manifold will expand the welding areas for welding classes and fabrication. The gas mixing system will allow us to mix our own shielding gasses allowing the program to use different welding processes. The natural gas pump will allow us to teach another cutting process to our students. **Year(s) Requested:** 2011-2012 **Request Date:** 02/01/2012	**Plan of Action:** Research best equipment and present to Perkin's committee **Type:** Equipment/Technology **Budgetary Impact:** 15-20,000$ **Perkins Eligible:** Yes		

Recommendations	Plans of Action & Budgetary Impact / Tasks	Status	Feedback & Follow-Up
Recommendation Priority: 3. High Priority **Supporting Evidence (SLO, WSCH, etc.):** The expanding need for alternative cutting processes and the need for alternative welding processes in industry are asking for students that have experience in these4 fields.			
YC - Manufacturing & Welding Technology Program Recommendations - New technologies for the Torchmate CNC Table - Add new technologies to the Torchmate CNC table allowing us to teach the students new methods in using a CNC Table **Year(s) Requested:** 2011-2012 **Request Date:** 02/01/2012 **Recommendation Priority:** 3. High Priority **Supporting Evidence (SLO, WSCH, etc.):** Technology in the CNC field is changing rapidly. Our students need to be exposed to these changes to be competitive in the industry.	**Plan of Action:** Get a quote for the technology, drive equipment, software, etc. Present to Perkin's committee **Type:** Equipment/Technology **Budgetary Impact:** 10,000$ **Perkins Eligible:** Yes		
YC - Manufacturing & Welding Technology Program Recommendations - Purchase a subscription to a Welding certification program - Purchase a subscription to a welding certification program to write WPS's and certifications for the students. **Year(s) Requested:** 2011-2012 **Request Date:** 02/01/2012 **Recommendation Priority:** 2. Medium Priority **Supporting Evidence (SLO, WSCH, etc.):**	**Plan of Action:** Research out best program for the department and present to the Perkin's committee **Type:** Curriculum/SLO **Budgetary Impact:** 2-3000$ per year **Perkins Eligible:** Yes		

Recommendations	Plans of Action & Budgetary Impact / Tasks	Status	Feedback & Follow-Up
The students need to have their "papers" (certifications) to apply for jobs, we currently do not have a program to write the certifications for the students. This software will operate in several codes and cross check them automatically for accuracy.			
YC - Manufacturing & Welding Technology Program Recommendations - Address budget needs - Increase the budget to allow for purchasing of materials that are needed and will take the limits off of what we need to teach our students. To properly fund the welding program, the budget should be raised by 15,000$ **Year(s) Requested:** 2012-2013 **Request Date:** 10/01/2012 **Recommendation Priority:** 3. High Priority			
YC - Manufacturing & Welding Technology Program Recommendations - Hand and Power tools - In crease the tools needed for fabrication and pipe welding. This will help the students to learn more about what they are going to see in the industry. **Year(s) Requested:** 2012-2013 **Request Date:** 10/01/2012 **Recommendation Priority:** 2. Medium Priority			
YC - Manufacturing & Welding Technology Program Recommendations - One year Certificate - Form a one year cohort style certificate program, where students can earn their welding certifications and a certificate from the college in one year. We	**Plan of Action:** Meet with the correct people about how to make this happen **Type:** Curriculum/SLO **Budgetary Impact:**		

Recommendations	Plans of Action & Budgetary Impact / Tasks	Status	Feedback & Follow-Up
will also continue to run the college style program we are currently running. This will require the hiring of new adjunct instructors and more funding. **Year(s) Requested:** 2012-2013 **Request Date:** 10/15/2012 **Recommendation Priority:** 3. High Priority **Supporting Evidence (SLO, WSCH, etc.):** The welding advisory committee has recommended that we create a pipe line for producing welders faster.	We will need more adjunct instructors and more funding for additional sections **Perkins Eligible:** Yes **Location:** YC Marysville Campus **DE Related:** No **HSI Related:** No		