

Barstow Community College

Instructional Program Review

PROGRAM:	Welding	
Academic Year:	2014-2015 Date Submitte	ed: Oct 4, 2014
	Ву:	
Faculty Lead:	Ken Graham	
Members:	Rick Bremen and Tom Pitard	

- 1. Mission and Vision
- 2. Description and Overview
- 3. Program Data
- 4. Curriculum
- 5. Internal Factors
- 6. External Factors
- 7. Continuing Education and Professional Development
- 8. Prior Goals and Objectives
- 9. Action Plan: Goals/Objectives/Actions
- 10. Resources

1. Program Mission and Vision

A. Program Mission

The goal of the Barstow Community College welding department is to impart to the student welder the skills necessary to safely and competently weld, using various welding processes, for personal pursuits, to gain entry level welding employment in the local economy and/or obtain the Welding Certificate/Associate Science Degree in Welding.

B. Program Vision (Where would you like the Program to be three years from now?)

The Welding Department needs to actively encourage the student welders to be aware of the job market. To this end, over the next few years the department should continue to develop good communications with potential employers in the area to establish listing for possible job offerings. Overall the Welding Department will continue to update with the changing technology in this industry.

C. Describe how mission and vision align with and contribute to the College's Mission and Vision

The Welding Program at BCC prepares the student with the basic skills necessary for a career in the welding field as well as providing learning opportunities giving the student the knowledge, skills, and AWS certifications necessary for success in this field and other endeavors.

DATE:	Oct 4, 2014
ANNUAL UPDATE #1:	C: AWS certifications.
DATE:	
ANNUAL UPDATE #2:	

2. Program Description and Overview

Assume the reader does not know anything about the Program. Describe the Program, including—but not limited to—the following:

- A. Organization, including staffing and structure
- B. Who do you service (including Demographics)?
- C. What kind of services does your program provide?
- D. How do you provide them?

The Welding Department has 3 Adjunct Instructors teaching all welding processes as well as Blueprint Reading. Weld 50-55 and 57 classes are offered in the Spring and Fall Semesters: M/W from 3:00 pm to 5:15 pm, M/W from 6:00 pm to 8:15 pm, T/Th from 3:00 pm to 5:15 pm and T/Th from 6:00 pm to 8:15 pm. In the Fall Semester Weld 56 Blueprint Reading is offered on M/W from 6:00 pm to 8:15 pm. The Welding Department services students from Barstow College, Barstow High School Silver Valley High School, Excelsior High School, as well as any other educational facilities in the Barstow area. Employers in the area including Santa Fe Railroad, Union Pacific Railroad, US Marine Corps Logistics Base, Moly Corp-Mountain Pass, County of San Bernardino Industrial Maintenance Mechanic training program, and other local welding facilities and businesses Ft Irwin National Training Center, Southern Calif. Edison, Southwest Gas Co., All welding classes are required for the Welding Certificate and the Associate of Science degree in Welding.

As well, American Welding Society Certification in various welding processes is provided to

students. All welding classes are presented in both classroom and shop environment for hands on learning. **DATE:** Oct 4, 2014 **ANNUAL UPDATE #1:** D: Spelling corrections. DATE: ANNUAL UPDATE #2: 3. Program Data A. PERFORMANCE DATA Discuss the program's performance on the specific data items listed below: 1) Full-time/Part-Time Faculty Ratio FT faculty = 0/ Part-time faculty = 3 = 0.3Part-time faculty = 100% of the program's instructors 2) Course Completion Rate **TRADITIONAL ONLINE** Not Applicable Not Applicable a) Full-time: Not Applicable 178/244 73% b) Part-time: 3) Course Success/Retention Rate **TRADITIONAL ONLINE** Not Applicable Not Applicable a) Full-time: Not Applicable 247/328 75% b) Part-time: 4) WSCH/FTEF Ratio **TRADITIONAL ONLINE** Not Applicable Not Applicable a) Full-time: Not Applicable Not Applicable b) Part-time:

5) Fill Rate					
a) Full-time:		TRAD	ITIONAL	ONLINE	
		Not Applica	ble	Not Applicable	
b) Part-time:		1st Day	24.43%	Not Applicable	
		Census	22.09%		
		EOT	19.54%		
DATE:	Oct 4, 2014	4			
ANNUAL UPDATE #1:	2: 3: 1.16 4: No chan 5: 0.16	ge			
DATE:					
ANNUAL UPDATE #2:					

- B. Progress on Program Level Outcomes (PLOs) and Student Learning Outcomes
 - 1) Summarize the progress your program has made on program and/or course level SLO measures. (Include Outcome Statements in this summary.)

Program Learning Outcomes:

- 1. Complete the Welding Certificate Program and/or obtain an Associate of Science Degree in Welding.
- 2. Weld, for personal pursuits using Oxy-Fuel Gas, Shielded Metal Are, Metallic Inert Gas, Tungsten Inert Gas, and other welding processes.
- 3. Demonstrate skills for entry level welding employment in the local economy.

Progress Summary – In 2012-2013, WELD course outlines of record were updated to accurately list the SLOs for each course taught in that academic year. All student learning outcomes were assessed for each course taught. We plan to continue to assess each class as it is taught.

2) Describe any program, course, and/or instructional changes made by your program as a result of the outcomes assessment process.

Revising the SLOs and course outlines of record has helped to align our specific areas of concern in the various welding processes, such as how the course objectives and methods of instruction relate, what's expected of the students and what they can expect from the course, and how they will be assessed.

3) Reflecting on the responses for #1 and #2 above, what will you implement for the next assessment cycle?

Any	new SLOs will be placed on the course outlines when courses are taught or created.
DA Annual Update i	TE: Oct 4, 2014 11: No changes.
DA Annual Update i	
1) Provi progr stude Ach	g Assessment Data (See Handbook for additional information) de a list of any additional measures (not included in 3.A.) that you have chosen to gauge your am's effectiveness (e.g.: transfers, degrees, certificates, satisfaction, student contacts, int headcount, Perkin's data, etc.). evement of AWS Welding processes certificates in areas of students interest upon pletion of courses in the Welding program.
Stud	narize the results of these measures. ents can use these as a basis for job applications. These are certificates outside the ding Certificate Program from BCC.
imple any r	did you learn from your evaluation of these measures, and what improvements have you mented, or do you plan*to implement, as a result of your analysis of these measures? (*List esources required for planned implementation in #10: Resources.) The are no changes at this time.
4) Include object N/A	le DCP Program Assessment Benchmarks, providing analysis of data on long term goals and tives.
DA Annual Update i	
DA Annual Update :	

D. Two-Year Scheduling Plan

1) What is the program's Two-Year Scheduling Plan? What changes, if any, have been made since the last Program Review?

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WELD A.S. (and Certificate) Two year plan follows the requirements as shown below:
Semester 1 (fall - even )
WELD 50,51,52,53,54,55,57,& 56
Semester 2 (spring - even )
WELD 50,51,52,53,54,55,57
Semester 3 (fall - odd )
WELD 50,51,52,53,54,55,57,& 56
Semester 4 (spring - odd )
WELD 50,51,52,53,54,55,57
Associate Of Science, Welding
Major Core Requirements (21 units)
WELD 50 Oxyacetylene Welding and Cutting 3
WELD 51 Shielded Metal ARC Welding 3
WELD 52 Position Welding (ARC Welding) 3
WELD 53 Soldering, Brazing, and Braze Welding 3
WELD 54 Gas Metal-ARC Welding 3
WELD 55 Gas Tungsten-ARC Welding 3
WELD 56 Blueprint Reading (Metal Trades) 3
Minimum Units Required in Major 21
General Education Requirements 27
Electives 12
Welding Certificate Of Achievement
Required Courses Units
WELD 50 Oxyacetylene Welding & Cutting 3
WELD 51 Shielded Metal Arc Welding & Cutting 3
WELD 52 Position Welding (Arc Welding) 3
WELD 53 Soldering, Brazing, & Braze Welding 3
WELD 54 Gas Metal - Arc Welding 3
WELD 55 Gas Tungsten - Arc Welding 3
WELD 56 Blueprint Reading (Metal Trades) 3
ENGLISH 50 -3
MATH 101 -3
CBIS
Total Units Required 28
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2) How effective has the Two-Year Scheduling Plan been in meeting student needs and educational goals?

With the number of classes offered each semester students have been able to complete both the AS degree in Welding and/or the Welding Certificate program in the two year time frame.

3) Reflecting on these results, what are the goals for the next assessment cycle?

To increase the number of students enrolled and completing the degree and certificate programs in Welding.

DATE:	Oct 4, 2014
ANNUAL UPDATE #1:	2: Added, to, between able and complete.
DATE:	
ANNUAL UPDATE #2:	

4. Curriculum

A. List any new courses or program changes since the last program review. Be sure to include any newly approved prerequisites or corequisites.

The department updated all course outlines with SLOs. One change was universal and mandated by the state to remove repeatability from courses. This was not shared with the Welding department as the department is all adjuncts and missed most of the discussions on this mandate.

B. Explain the current evaluation process. How and when was the curriculum last evaluated? (Appropriateness, archiving, deleting, revising, etc.)

The curriculum for WELD was evaluated in 2012-2013 – resulting in the new SLOs on the course outlines.

The curriculum process at this time, relies on CTE training, program review and curriculum requirements. There is no standing curriculum discussion in the department because only adjuncts teach in the discipline.

C. List any courses not in full compliance with Curriculum Committee Standards, including those that have not been updated in the past six years (see <u>Curriculum Manual</u> for additional information, if necessary).

All courses should be in full-compliance at this time. Pre-requisites are in for validation at this time.

D. Curriculum Development: What is the plan for maintaining the currency and viability of your curriculum (including all modes of delivery)?

Welding is primarily hands -on and there are no clear plans to change mode of delivery at this time To off-set any repeatability changes due to the state mandate, the Welding department will review possibility of creating a "family" of courses to help increase skills for students and/or see if the welding courses meet the 'recertification" criteria for classes that are repeatable.

DATE:	Oct 4, 2014
ANNUAL UPDATE #1:	
	A: Eliminate: This was not shared with the Welding department as the department is all adjuncts and missed most of the discussions on this mandate. B: Change date to 2013-2014. C: Pre-requisites are valid now D: Still in process
DATE:	

ANNUAL UPDATE #2:
5. Internal Factors (see Handbook for worksheet)
A. Strengths
Competent, experienced, well-educated faculty, trained in most aspects of the welding trade to include welding processes, testing procedures, including destructive and non-destructive test procedures, familiar with many of the technical nuances of the welding industry.
B. Weaknesses
Limited equipment due to need for additional power to operate more equipment, as well as class room space for lecture capabilities as needed.
DATE: Oct 4, 2014
ANNUAL UPDATE #1: B: Additional ducted ventilation needed for student safety.
DATE:
Annual Update #2:
6. External Factors (see Handbook for worksheet)
A. Opportunities Business trends in the immediate area which link to job opportunities for students as they progress
in their education toward graduation.
B. Threats
Fears of economic depression in this service area because job growth subsides or doesn't come to fruition at all.
DATE: Oct 4, 2014
ANNUAL UPDATE #1: No change.
DATE:
Annual Update #2:

7. Continuing Education/Professional Development

A. What continuing education and/or professional development activities have program/unit members participated in during the current cycle?

WELD instructors regularly attend the Barstow Community College CTE training. In addition one instructor is currently American Welding Society certified as a Certified Welding Inspector. This qualifies the department to certify students in various welding processes through the AWS.

B. What are the continuing education and/or professional development plans for the upcoming cycle?

Plans are to send all Welding Instructors to the AWS Certified Welding Inspector training course for certification as well when this training becomes available.

Date:	Oct 4, 2014
ANNUAL UPDATE #1:	No changes.
DATE:	
ANNUAL UPDATE #2:	
8. Prior Goals/Ol	pjectives
	the progress your program/ has made in meeting the goals and objectives identified in rogram Review or Annual Update. (Include measurements of progress or assessment
No tasks or goals completing that	s were identified on the last program review due to need for additional training on section
DATE:	Oct 4, 2014
ANNUAL UPDATE #1:	Currently ongoing.
DATE:	
ANNUAL UPDATE #2:	

9. Goals/Objectives/Actions (ACTION PLAN)

- **A. GOALS:** Formulate Program Goals to maintain or enhance program strengths, or to address identified weaknesses.
- B. ALIGNMENT: Indicate how each Goal is aligned with the College's Strategic Priorities.

- C. OBJECTIVES: Define Objectives for reaching each Goal.
- **D.** ACTIONS/TASKS REQUIRED TO ACHIEVE OBJECTIVE: Create a coherent set of specific steps (Actions/Tasks) that must be taken to achieve each Objective.
- **E. OUTCOMES:** State intended Outcomes and list appropriate measures and assessment methods for each Outcome.
- F. ADDITIONAL INFORMATION: This area provides for the additional communication of information necessary to further "close the loop" on the goal or action plan, as it relates to Institutional Planning. This may include references to other institutional documents, such as governing or compliance documents (i.e. Board Policy, Administrative Procedures, Title V), institutional planning documents (i.e. Strategic Plan, Educational Master Plan, Facilities Plan, Technology Plan), or Board, Presidential, Supervisory or Departmental recommendations or goals, etc. (See Handbook for additional examples.)

Complete the following table with your Program's ACTION PLAN, which must include a minimum of 3 goals:

	ACTION PLAN						
GOAL		ALIGNMENT WITH BCC STRATEGIC PRIORITIES (click link for list of Strategic Priorities)	OBJECTIVE	ACTIONS/TASKS REQUIRED TO ACHIEVE OBJECTIVE	OUTCOMES, MEASURES, and ASSESSMENT		
#1 Attract more Students List - Fos envir - Pro expe - Pro enga - Cult partr - Attr		List all that apply: - Foster innovative learning environment - Provide Successful college learning experience - Promote and support student engagement - Cultivate and enhance local partnerships - Attract/develop excellent employees - Strengthen college planning/	#1 Improve dialogue with local businesses	- Work with dean of CTE to outreach at employment summits	OUTCOMES: Business helping inform employees of welding program MEASURES: ASSESSMENT: Enrollment numbers and Class survey on why students are taking class and where they heard about the program		
	- Strengthen college planning/decision making		#2 Have counselors and other student contacts become more engaged in the welding department goals	- Outreach to other areas on campus by attending meetings when possible or trying alternative methods of discussions if necessary.	OUTCOMES: more students being informed of welding program MEASURES: ASSESSMENT: Enrollment numbers and Class survey on why students are taking class and where they heard about the program		
			#3 Promote in the community	- Work with dean of CTE to outreach and Public Information officer to promote in more venues or in more ways	OUTCOMES: More community acknowledgement of welding program MEASURES: ASSESSMENT: Enrollment numbers and Class survey on why students are taking class and where they heard about the program		
	Additional Information:						
	DATE: Oct 4, 2014	ANNUAL UPDATE #1: Ongoing p	process.	-			
	DATE:	ANNUAL UPDATE#2:					

				ACTION PLAN		
	GOAL	ALIGNMENT V BCC STRATEGIC P (click link for list of Strate	RIORITIES	OBJECTIVE	ACTIONS/TASKS REQUIRED TO ACHIEVE OBJECTIVE	OUTCOMES, MEASURES, and ASSESSMENT
equipment to accommodate increased enrollment. 2. Increase ventilation. - Foster innovative lead environment - Provide Successful context experience - Promote and support		 - Provide Successful colle experience - Promote and support st 	ing ege learning	#1 To increase student's time in welding activity.	Funding will be needed to purchase needed equipment.	Outcomes: Needed equipment will be obtained without excessive budget needs of the college being over extended.
	engagement - Strengthen college planning/ decision making		nning/	#2 To update and upgrade the weld lab equipment.	Through grants or donations from local businesses.	Assessment: Will be an increase in student success rates overall Surveys of local business will attest to these successes.
				#3 To improve and modernize to industry standards to benefit the student upon graduation. Also from other educational oriented companies or organizations.		
	Additional Information:					
	DATE: Oct 4, 2014	ANNUAL UPDATE #1:	2-1 and sa 2 increase	afety. e ventilation.		
	DATE:	ANNUAL UPDATE #2:				
#3	Lecture area provided in shop/lab area with environmental consideration for noise and air pollution.	List all that apply: - Foster innovative learni environment - Provide Successful colle experience - Promote and support stengagement	ing ege learning	#1 Increases instructional capabilities by allowing lectures for one welding process be conducted while others are working in the shop areas.	Construction of walls, etc. using construction class students to build and learn.	Outcomes: Costs could be minimal if college used this as a learning experience for construction students.
				#2 Environmentally safe for student learning.	Noise and air pollution decreased	Assessment: Again will be seen by overall enrollment and success of students.
				#3 Quiet atmosphere for learning objectives	More conducive for learning .	
	Additional Information:				1	1

	ACTION PLAN					
GOAL ALIGNMENT WITH BCC STRATEGIC PRIOF (click link for list of Strategic Pr			ORITIES OBJECTIVE	ACTIONS/TASKS REQUIRED TO ACHIEVE OBJECTIVE	OUTCOMES, MEASURES, and ASSESSMENT	
	DATE: Oct 4, 2014	ANNUAL UPDATE #1: No	No change, ongoing request.			
	DATE:	ANNUAL UPDATE #2:				
#4		List all that apply:	#1			
			#2			
			#3			
	Additional Information:					
	DATE:	ANNUAL UPDATE #1:				
	DATE:	ANNUAL UPDATE #2:				
#5		List all that apply:	#1			
			#2			
			#3			
	Additional Information:		,			
	DATE:	ANNUAL UPDATE #1:				
	DATE:	ANNUAL UPDATE #2:				
#6		List all that apply:	#1			
			#2			
			#3			
	Additional Information:					
	DATE:	ANNUAL UPDATE #1:				

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	ACTION PLAN					
GOAL ALIGNMENT WITH BCC STRATEGIC PRIORITIES (click link for list of Strategic Priorities)		OBJECTIVE	ACTIONS/TASKS REQUIRED TO ACHIEVE OBJECTIVE	OUTCOMES, MEASURES, and ASSESSMENT		
	DATE:	ANNUAL UPDATE #2:				

10. Resources Required

List all significant resources needed to achieve the objectives shown in the table above, including personnel, training, technology, information, equipment, supplies, and space. Every request for additional resources must support at least one objective.

Also list any resources required to implement planned improvements noted in 3.C.

IMPORTANT: A <u>BUDGET ALLOCATION PROPOSAL</u> must be completed and submitted for **EACH** new resource requested. (*Click the link to access the form.*)

Goal #	Objective #	Resource Required	Estimated Cost	BAP Required? Yes or No	If No, indicate funding source
1	1,2,3	Time and support for outreach – also holding meetings with counselors and other key contacts on campus and in the community	????		
2.		Equipment and supply needs.	\$51,000		Funding will be needed to purchase needed equipment Through grants or donations from local businesses Also from other educational oriented companies or organizations
3.		Increased quiet lecture space.	Minimal if under taken by a college course in construction trades.		
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ANNUAL UPDATE #1:

DATE:	Oct 4, 2014
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Goal #	Objective #	Resource Required	Estimated Cost	BAP Required? Yes or No	If No, indicate funding source
2		Equipment and supply	\$75,000	Yes.	
		needs			
3		Increased quiet lecture	\$5000	Yes	
		space.			
1		Time and support for outreach – also holding meetings with counselors and other key contacts on campus and in the community	\$7500	No	Unknown
4		Increased electrical power	\$100,000	Yes	
		due to increased enrollment			

2014-2015

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		and to meet departmental				
		goals.				
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Goal #	Objective #	Resource Required	Estimated Cost	BAP Required? Yes or No	If No, indicate funding source