Industrial Arts Department
Annual Unit Plan for Academic Year 2018-2019
October 2017

Describe Department/Unit

Connection to College Mission

It is the mission of the Industrial Arts Department to provide courses and instruction that will meet the academic, vocational, and general education needs of our students, college, and communities. We provide instruction leading to Associate degrees and certificates in multiple occupational areas including: Welding, Industrial Technician, and Machine Tools. The programs in the Industrial Arts Department provide life-long learning and support to students in their academic, technical, and vocational pursuits. The goal of our programs is to foster in students a lifelong desire to learn, a passion to excel, and a commitment to contribute actively to their local community. Students graduating from the department's programs will be prepared to enter the job market in entry level positions with a variety of focus including but not limited to: construction, mining, manufacturing, drafting, welding, fabrication and machine shops, electronics, railroads, automotive, as well as the aircraft, marine, aerospace, and renewable energy industries.

Report on Improvements Made and Gaps Identified in the Prior Year

Student Equity: Actions Taken

The Welding program's largest gap is with the women population. We have featured women in brochures and success stories.

Student Equity: Gaps to be Addressed

Ethnicity: African American

Gap Identified:

The African American population for 2016-2017 was 2% compared to college wide 5%. The numbers are slightly skewed due to the actual number of students. The Welding program had 3 African American students in 2016-2017 compared to the college with 478 students.

Gender: Female

Gap Identified:

The female population for Welding in 2016-2017 was 7% compared to college wide 59%. This is not abnormal as women in welding is non-traditional. The department has taken measures to promote women in welding.

Outcomes Assessment: Actions Taken

Actions taken in the prior academic year

INDE C060 SLO #3 did not meet the target. More time has been allotted for this section of the course to assist students with the understanding of trade related word problems. All other assessments done were met successfully.

Assessments completed in the prior academic year

INDE C060 Mathematical Applications for the Trades.

WELD C204 Pipe and Tube Welding.

Outcomes Assessment: Gaps to be Addressed

INDE C060 Mathematical Applications for the Trades

Type:

SLO

Target Missed/Gap Detected:

SLO #3 target was not met.

Solve trade related word problems using algebra, geometry, and trigonometry.

Target is 65% and the result was 55% of students meeting the outcome.

Type of Gap:

Need to alter/refine course content.

Analysis and Plan for Improvement:

More time is being allotted for this section of the course.

Anticipated Semester for Implementing Planned Improvements:

Spring 2017

Anticipated Semester of Next Assessment:

Spring 2018

Program Review: Actions Taken

Welding Technology

Year of Last Program Review:

2012

Actions Taken in the Prior Year to Address Strategies:

The department has been working with experienced individuals in the area to become a part of our adjunct pool.

A new full time TA has been hired.

Both full time instructors attended FabTech trade show in the fall of 2017.

The Industrial Technology program has been through the CIC process and approved at the state level.

Strategies Still to be Addressed:

The Oxy/Acetylene Lab has yet to be renovated. The modernization of the existing lab will consist of 24 dedicated welding stations for students, allowing each student to now have their own welding station. Currently there are still 12 stations and students are forced to share a station. The quality of work has been proving to be far superior when a student is not required to share a station. There actual time welding is double with their own welding station.

New updated brochures need to be developed. The department has been in contact with the webmaster to possibly have a link added to the college website that shows live welding demonstrations. The addition of weld specific camera will greatly assist in this effort.

Annual Planning: Actions Taken

Create Educational Resources for Courses

This is an ongoing process as there are several videos to be made throughout each semester.

Launch the new Industrial Technology program

The Industrial Technology Program has been approved at the state level.

Modernization of Oxyacetylene Laboratory

Plans are conceptualized. Modernization of oxyacetylene lab is not able to be completed until construction of main building is complete.

Review of Current Year Initiatives

Reminder of Initiatives for the Current Year

Create Educational Resources for Courses

N/A

Modernization of Oxyacetylene Laboratory

N/A

Machining Class Equipment

N/A

Professional Development

N/A

Plan Initiatives for Next Year

Initiatives for Next Academic Year

Create Educational Resources for Courses

Is this part of a multiyear initiative?

Yes

Specific Action Steps to be Taken:

Producing more live welding demonstrations for students viewing and improving student performance.

Lead Measure of Success:

Student's understanding of particular exercise.

Are any of the lead measures identified above lacking assessment instruments?

No

Does the department request help to develop these instruments?

No

Lag Measure of Success:

Increased students success.

Person Responsible:

Faculty

It addresses a gap in student equity

This can affect every population as students in each population have both visual and audible learners. This will help the more visual learners throughout every class.

Which strategic goal does this initiative address?

Goal 1: Maximize Student Success, Goal 2: Advance Student Equity Measures

Modernization of Oxy/Acetylene Laboratory

Is this part of a multiyear initiative?

Yes

Specific Action Steps to be Taken:

Modernization of the existing Oxy/Acetylene lab to accommodate 24 individual work stations. This would require new exhaust duct work, re-piping of oxygen and acetylene gases, new work tables/stations, torches and regulators, removal of office in the middle of the room.

Lead Measure of Success:

Beginning renovation of existing lab.

Are any of the lead measures identified above lacking assessment instruments?

No

Does the department request help to develop these instruments?

No

Lag Measure of Success:

Completion of the modernization of the existing lab.

Person Responsible:

Faculty, Department Chair, Maintenance and Operations

It addresses a program review strategy

Goal #1 of previous program review. Additional space/lab area.

Which strategic goal does this initiative address?

Goal 1: Maximize Student Success

Build storage area for MCTL C107 materials

Is this part of a multiyear initiative?

No

Specific Action Steps to be Taken:

Design and build storage area for materials used throughout the MCTL C107 course.

Lead Measure of Success:

Ordering supplies.

Are any of the lead measures identified above lacking assessment instruments?

No

Does the department request help to develop these instruments?

No

Lag Measure of Success:

Completion of storage area.

Person Responsible:

Faculty

Other

Building a storage area for the materials used in MCTL C107 will create a more organized and safe lab area for students to work in a long with making inventory much easier.

Which strategic goal does this initiative address?

Goal 1: Maximize Student Success

Build lockers for foyer room 198

Is this part of a multiyear initiative?

No

Specific Action Steps to be Taken:

Design and build more lockers for student use.

Lead Measure of Success:

Ordering materials.

Are any of the lead measures identified above lacking assessment instruments?

No

Does the department request help to develop these instruments?

No

Lag Measure of Success:

Completion of lockers.

Person Responsible:

Faculty

Other

The Welding program requires the use of several pieces of personal protective equipment (PPE). This equipment can be large and heavy. Having the ability to use a locker makes it much more convenient for students to keep track of the PPE.

Which strategic goal does this initiative address?

Goal 1: Maximize Student Success

Begin offering Welding Processes Certificate in Tehachapi

Is this part of a multiyear initiative?

No

Specific Action Steps to be Taken:

Hire an adjunct instructor to teach in the Tehachapi facility. Begin teaching classes.

Lead Measure of Success:

Lead measures would be getting adjuncts to apply for the position and getting the materials needed to the facility.

Are any of the lead measures identified above lacking assessment instruments?

No

Does the department request help to develop these instruments?

No

Lag Measure of Success:

Hiring of an adjunct instructor. Begin teaching classes.

Person Responsible:

Department Chair

It addresses a program review strategy

Begin offering the Welding Processes Certification in Tehachapi. The Tehachapi campus is the largest growing Cerro Coso Community College Center. Not only will we be able to offer this certificate in the Tehachapi area, this could also lead to dual enrollment with Tehachapi High School.

Which strategic goal does this initiative address?

Goal 3: Ensure Student Access

Evaluate Resource Needs

Facilities

Modernization of the Oxy/Acetylene lab.

Removal of center office in Oxy/Acetylene lab.

Remove automotive lifts in the back yard.

Remove solar house in the back yard.

Have needed repairs made to our iron worker in the Oxy/Acetylene lab.

Work stations, piping and venting for modernization/upgrading of oxyacetylene welding lab room 192W.

Remove vacuum exhaust unit from North wall of new welding lab room 147W.

Chop saw and rollers.

Sumner pipe stands 6ea.

Pipe stands with rollers 6ea.

Welding curtain material for portable welding curtains.

Portable fume extractor 2ea.

Plate beveller.

Desktop 3D printers 20ea.

New shear for cutting metal.

Replacement of old welding machines, combination smaw/gtaw, and gmaw 10ea

Weld camera equipment.

Replace all drop down air lines in labs.

Better lighting in the new welding lab room 147W. The current lighting casts shadows in the welding booths making it difficult to see.

New tool boxes with rollers.

4 Plasma cutters.

Information Technology

Video projection equipment with wireless connection from computers for rooms 192, 198 and 147.

Marketing

We would like new brochures and banners for our department made.

Ads in swap sheet and local newspapers to assist in enrollments.

Videos on college website.

Professional Development

Department members wish to attend conferences, work shops, or events related to trade skills or teaching/learning skills as opportunity arises.

Certified welding inspector training for faculty member.

Department members would like to attend the WestTec trade show in the Fall of 2018.

Attend flex day activities.

Staffing Requests

1000 Category - Certificated Positions

None at this time

Location:

Justification:

2000 Category - Classified Staff

None at this time

Location:

Salary Grade:

Number of Months:

Number of Hours per Week:

Salary Amount:

Justification: