

Comprehensive Program Review Report



Program Review - Construction Technology

Program Summary

2020-2021

Prepared by: Brian Unruh

What are the strengths of your area?: Partnership with Tulare County Building Department who is willing to introduce students to the real world of inspections by offering ride alongs with their inspectors. In addition they have offered to give courtesy inspections for the COS project house.

Ongoing relationship with area business partners that often seek to hire students from the Construction Tech program upon completion of their degree or certificate.

Advisory Committee: The Advisory Committee is very strong and comprised of members committed to the Construction Tech program.

Organized curriculum: I have spent time to streamline information in each class to eliminate information overlap, and specify the outcomes for each class.

Instructors: The knowledge of the instructors is a great strength. The full time instructor has over 20 years in construction experience. In addition, the adjunct instructors have remarkable experience in their fields as well. One new adjunct instructor was brought in for teaching the Electrical Codes, and Auto Cad classes.

New Online instruction: The full time instructor has achieved certification as an online instructor. This will benefit students and give greater opportunity to the community for those who's schedule will not allow class attendance.

What improvements are needed?: More space is needed. The current facility is small for the size of classes we currently have. The wood shop has limited space for equipment and work space, and students commonly need to wait for an opportunity to use specific machinery. Enrollment has increased over the past few years and it is common for classes to be full with a waiting list. Although this is wonderful for the program, the difficulty is finding room to work in the current wood shop.

Part-time CT lab assistant is needed. Ordering materials, tool maintenance, subcontractor coordination, and laboratory assistance are some of the jobs for this position.

Describe any external opportunities or challenges.: Various business partners have contacted me about future employment for the COS students which has been both a great opportunity as well as a challenge. Although this has been a great opportunity for students, and I am glad to build relationships with these businesses, the challenge is providing students who are equipped to join the work force.

COVID 19 has also been a challenge! Learning to instruct online classes for a specific skill is very difficult!

Overall SLO Achievement: With the added class time used in teaching fundamentals of framing floors, walls, and roofs, students have been better equipped to enter the work force upon completion of their respective degrees and certifications.

Some outcomes were not met in the Spring 2020 semester due to the transition from in class to online learning. Student were unable to have any hands on labs that reinforced the topics covered in class.

Changes Based on SLO Achievement: Upon consulting the CT advisory committee, further changes will be made to CT 105 that will help students better understand how to plan, schedule, and stay on track with construction bids by introducing Gantt charts. Additionally more specific outcomes will be met in the future with the separation of CT 260/262 that had been "stacked" due to low enrollment in the past. In future semesters, these classes will meet individually and will allow greater assessment of their respective class learning outcomes rather than as a whole in both classes.

Overall PLO Achievement: Although currently all courses are being taught online as an emergency condition due to COVID 19, In the future, more CT courses will be offered online with the recent certification of online instruction by the full time Construction Technology instructor. Offerings in this field will be CT 132, CT 105, and many of the courses offered under the AS in Construction Inspection Program.

Some of the outcomes were not met in the Spring 2020 semester due to COVID 19 and transitioning from in class learning to online learning. With time to evaluate procedures and teaching approaches, I anticipate better outcomes in the coming school

year.

Changes Based on PLO Achievement: More courses will be offered online for AS in Const. Insp. which will open opportunities for students who's schedule doesn't allow attendance to a traditional classroom setting. Due to the courses being offered online, more classes will need to be approved with the Distance Education Addendum. I will be continuing the updates throughout the school year.

Outcome cycle evaluation: The past cycle has been a very difficult one due to the results of a world wide pandemic. New approaches to teaching and learning had to be implemented with very little planning which caused much confusion. Students and teachers in our program had a difficult time with the adjustment. Some students experienced a lack of technology such as computers and internet, while some students lost interest all together. For those who were able to stay connected through the transition, they did continue learning but at a slightly slower rate. The Spring 2020 Semester has been very hard, and perhaps we have lost some time due to the transition. I am hopeful that with time to regroup and introduce new approaches to teaching and learning the future will offer a bright experience for students in the Construction Tech. Program.

Action: Provide updated tools for students to use during lab activities.

Increase student success through the updating and addition of industry driven technology.

Leave Blank: New Action

Implementation Timeline: 2020 - 2021

Leave Blank:

Leave Blank:

Identify related course/program outcomes: CT 220 - Outcome #1: After completing this course students will demonstrate proper job site safety and safe use of power tools to avoid personal injury

CT 221 -Outcome #3: After completing this course, students will demonstrate proper maintenance of power tools used on classconstruction projects.

CT 250 - Outcome #3: Given a hand-held circular saw, students will be able to demonstrate its safe and proper operation and pass a safety test on circular saws with 100% accuracy.

Person(s) Responsible (Name and Position): Brian Unruh

Rationale (With supporting data): The construction industry is dependent upon specialized technology used in every area of this industry. Through discussions with my industry partners, I have identified the need for modernization and updates of industry recommended technologies.

Priority: High

Safety Issue: No

External Mandate: No

Safety/Mandate Explanation:

Update on Action

Updates

Update Year: 2020 - 2021

09/21/2020

Status: Continue Action Next Year

Due to the demolition of the Buckeye building, a temporary classroom is being remodeled in Cedar 425 which will accomodate 22 student stations. The new classroom will have large screens and a computer at each student station that will be an upgrade from the classroom in the Buckeye building.

Impact on District Objectives/Unit Outcomes (Not Required):

Update Year: 2020 - 2021

08/28/2020

Status: Action Completed

The Construction Tech Program was able to purchase some new equipment and software for the program. A new CNC machine was purchased along with the software for creating endless designs to be used for wood working and cabinetry. Also, a 3D printer was purchased which allows students to use Auto Cad to draft and print objects.

Impact on District Objectives/Unit Outcomes (Not Required):

Resources Description

Equipment - Instructional - Purchase new battery tools, carpenter tools, and drywall tools. (Active)

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Why is this resource required for this action?: DO 2.2 and 2.4

Currently the COS wood shop does not have adequate carpenter tools to provide students with a real world work experience which will prepare them for their future in construction.

-Student feedback indicates that the current framing hammers are not comparable to the tools that will be used when students become employed in the construction field.

-Tool belts are required while working on wall framing, drywall installation, and other activities performed in the field. Students need tool/nail belts to learn how to finger nails quickly to perform at production level upon employment in the field.

-Current battery tools do not provide long enough battery life and inhibit students from continued operation while working on lab activities. New battery tools will provide longer lasting operation which will allow students to remain on task.

Rank #1

Notes (optional):

Cost of Request (Nothing will be funded over the amount listed.): 2000

Equipment - Non-Instructional - Fliers/brochure/video Rank #2 (Active)

Why is this resource required for this action?: Fliers, brochures, and videos are needed to provide marketing for the Construction Technology Department.

This medial will be provided to High school students during campus visits, and at various outreach events. Additionally updated videos will be produced which highlight the Construction Technology department and will be uploaded to the website for promotional purposes.

Notes (optional):

Cost of Request (Nothing will be funded over the amount listed.): 5000

Equipment - Instructional - Continuing education for Construction Technology Instructors (Active)

Why is this resource required for this action?: Due to developing technology in the construction field, ongoing education is required for instructors to provide updated information in class.

Notes (optional):

Cost of Request (Nothing will be funded over the amount listed.): 2500

Equipment - Non-Instructional - Existing tool repair. (Active)

Why is this resource required for this action?: Many of the power tools in the wood shop are in need of repair and maintenance.

Items to be repaired are: Large belt sander, Spindle sander, Table Saw blade sharpening, and Panel router air system

Notes (optional):

Cost of Request (Nothing will be funded over the amount listed.): 500

Link Actions to District Objectives

District Objectives: 2018-2021

District Objective 2.1 - Increase the percentage of students who earn an associate degree or certificate (CTE and Non-CTE) by 5 percentage points over three years

District Objective 2.2 - Increase the number of students who transfer to a four-year institution by 10 percent over three years

District Objective 2.4 - By 2021, Increase the percentage of CTE students who achieve their employment objectives by 5 percentage points

District Objectives: 2015-2018

District Objectives - 2.2 - Increase the number of students who earn an associate degree or certificate annually.

District Objectives - 2.4 - Increase Career Technical Education course success rates and program completion annually.

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