Cycle: 2017-2021

FDTC WELDING Diploma PROGRAM

Program Mission Statement:
The Welding Diploma Program provides students with the principles, methods, techniques and skills required for entry level welding jobs. After graduating, students will have the skills that will enable them to enter the workforce where there are many opportunities in maintenance, construction, fabrication, and pipe welding.

Division: Technical and General Education
AVP: Dan Averette
Department Chair: Jamie King
Director:
SACSCOC Standard: 8.2A

Accrediting Agency: ☐ Yes ☒ No
Name:
Certification Exam(s): ☐ Yes ☒ No
Agency Name:
Credential:

Program Student Learning Outcome	Monitoring Year
Apply knowledge of oxy-fuel cutting and welding processes	2017-2018
Demonstrate how to read blue prints and interpret weld symbols	2018-2019
Demonstrate knowledge of the differences in all welding processes	2019-2020
Apply knowledge of safety in a welding environment	2020-2021

STUDENT LEARNING OUTCOMES FOR DAS.WLD-104 -- 2017-2018

A. Program Student Learning Outcomes	B. What courses are PSLOs Assessed	C. Methods for Outcomes Assessment	D. Expected Level of Program Performance	E. Data Collection	F. Results	G. Plan For Improvement
What should the graduates of your program be able to do?	Where do you see evidence that the student can do these things?	How does your program evaluate student/graduate skills/abilities?	What is the expected level of student performance for the program?	When will you collect the data needed to evaluate the performance of the program?	What are the results of the evaluation? NOTE: include student ratio with all results.	How will you use this information to improve the program
Apply the knowledge of oxy-fuel welding and cutting processes.	WLD 104 Gas welding and cutting	Students will have to demonstrate knowledge and perform tasks using the gas welding process to make different types of cuts.	75% of students will pass the Final Exam with a score of 70% or better.	Spring 2018	15 out of 15 students (100%) received a 70% or higher on the Final Exam for this assessment. The lowest score was a 73% and the highest score was 97%. The cohort average was 84.56%.	The expected learning outcome was met. The faculty are offering additional lab time to ensure students can complete more gas cutting tasks on a weekly basis.

STUDENT LEARNING OUTCOMES FOR DAS.WLD-105 -- 2018-2019

A. Program Student Learning Outcomes	B. What courses are PSLOs Assessed	C. Methods for Outcomes Assessment	D. Expected Level of Program Performance	E. Data Collection	F. Results	G. Plan For Improvement
What should the graduates of your program be able to do?	Where do you see evidence that the student can do these things?	How does your program evaluate student/graduate skills/abilities?	What is the expected level of student performance for the program?	When will you collect the data needed to evaluate the performance of the program?	What are the results of the evaluation? NOTE: include student ratio with all results.	How will you use this information to improve the program
Demonstrate how to read blue prints and interpret welding symbols.	WLD 105 Print Reading II	Students will demonstrate how to identify weld symbols and critical elements on a blueprint drawing.	70% of students will pass final exam with a 70% of better.	Spring 2019	14 out of 16 students (87.5%) received a 70% or higher on the Final Exam for this assessment. The lowest score was a 61% and the highest score was 100%. The cohort average was 77.31%.	The expected learning outcome was met. The faculty have determined that more practice print drawings will be assigned to ensure homework and test objectives are improving.

STUDENT LEARNING OUTCOMES FOR DAS.WLD-102 -- 2019-2020

A. Program Student Learning Outcomes	B. What courses are PSLOs Assessed	C. Methods for Outcomes Assessment	D. Expected Level of Program Performance	E. Data Collection	F. Results	G. Plan For Improvement
What should the graduates of your program be able to do?	Where do you see evidence that the student can do these things?	How does your program evaluate student/graduate skills/abilities?	What is the expected level of student performance for the program?	When will you collect the data needed to evaluate the performance of the program?	What are the results of the evaluation? NOTE: include student ratio with all results.	How will you use this information to improve the program
Demonstrate knowledge of the differences in all welding processes.	WLD 102 Introduction to Welding	Students will be able to explain the fundamental information about the welding processes, cutting processes, and know the importance of fabrication process.	70% of students will pass Chapter 1 Exam with a score of a 70% or greater.	Spring 2020	13 out of 13 students (100%) received a 70% or higher on the Final Exam for this assessment. The lowest score was a 72% and the highest score was 98%. The cohort average was 86.23%.	The expected learning outcome was met. To improve the educational experience for the student, more video content will be displayed in D2L explaining each welding processes.

STUDENT LEARNING OUTCOMES FOR DAS.WLD-110 -- 2020-2021

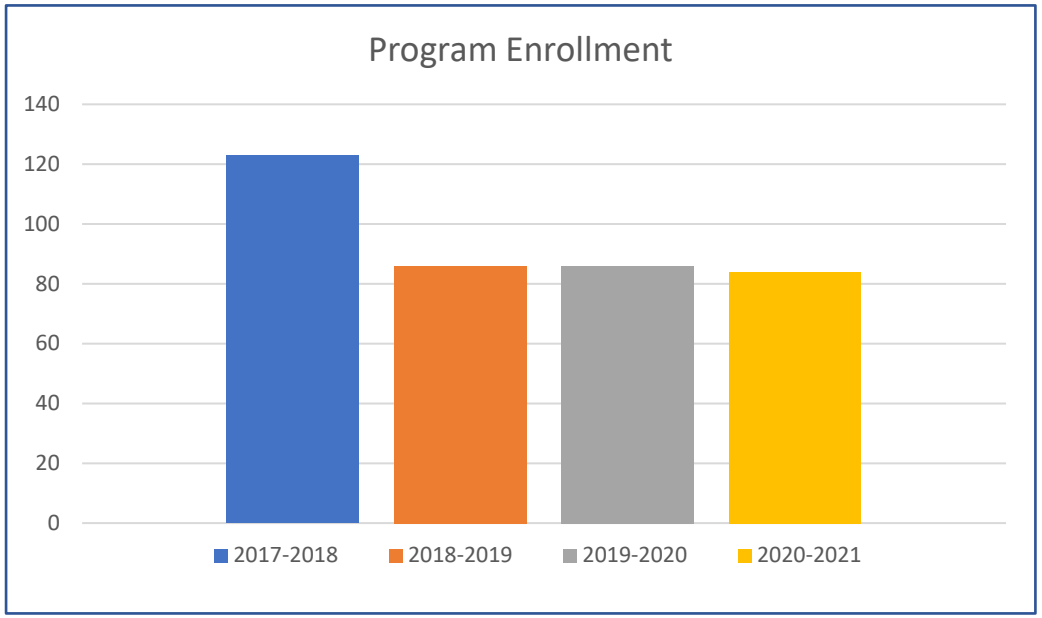
A. Program Student Learning Outcomes	B. What courses are PSLOs Assessed	C. Methods for Outcomes Assessment	D. Expected Level of Program Performance	E. Data Collection	F. Results	G. Plan For Improvement
What should the graduates of your program be able to do?	Where do you see evidence that the student can do these things?	How does your program evaluate student/graduate skills/abilities?	What is the expected level of student performance for the program?	When will you collect the data needed to evaluate the performance of the program?	What are the results of the evaluation? NOTE: include student ratio with all results.	How will you use this information to improve the program
Apply knowledge of safety in a welding environment.	WLD 110 Welding Safety & Health	Students will explain the importance of work safety, identify the degree of burns and demonstrate the use of first aid.	70% of students will pass Ch.2 Exam with a score of 70% or greater	Spring 2021	9 out of 9 students (100%) received a 70% or higher on the Ch. 2 Exam for this assessment. The lowest score was a 73% and the highest score was 95%. The cohort average was 82.22%.	The expected learning outcome was met. However, the faculty are increasing the amount of safety materials and content that will be posted on D2L for students to view and apply in the labs.

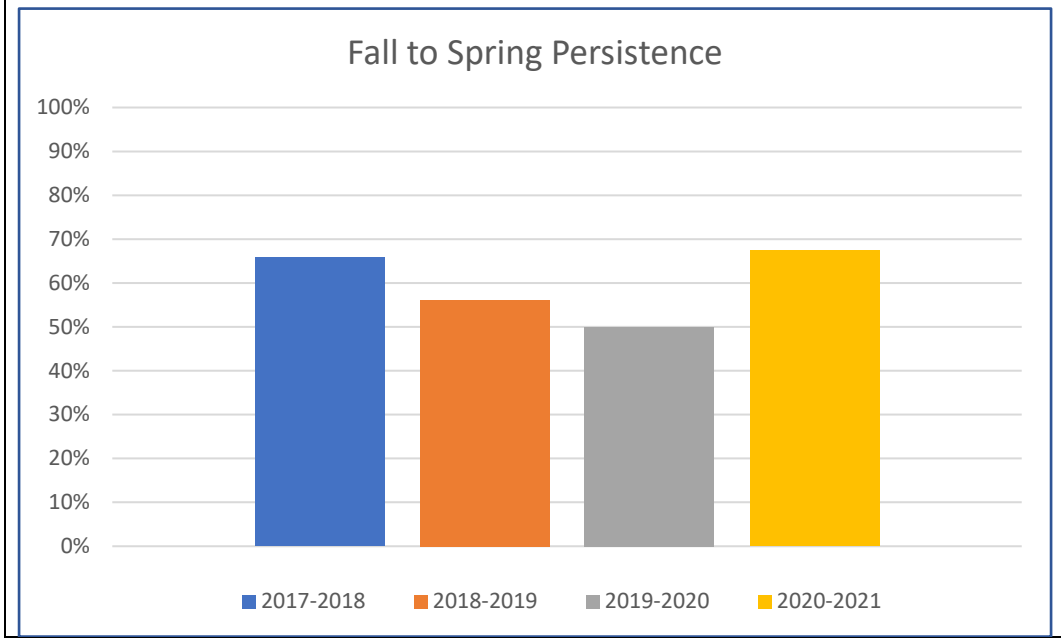
CONTINUOUS STUDENT IMPROVEMENT

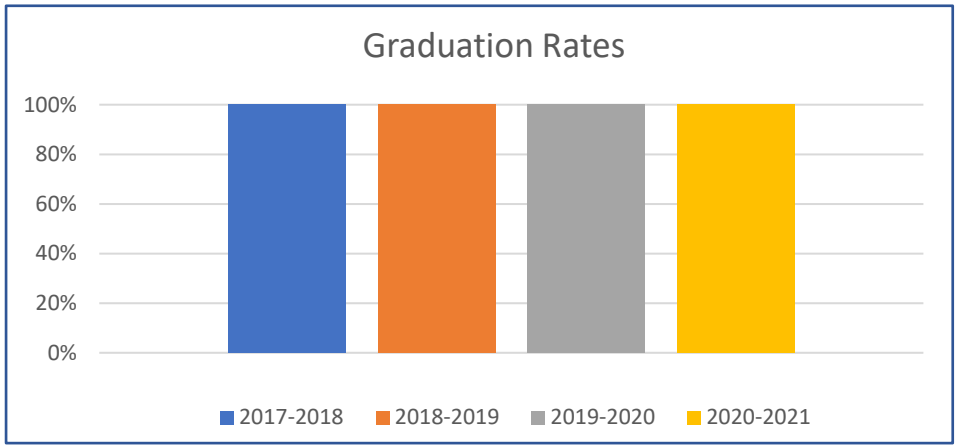
When the faculty analyzed this cycle's performance with the data of the previous cycle, we have found that students did excel in some areas, but academic achievement was lost in other areas. The difference in success in some courses versus other courses could be because of the hands-on laboratory courses like WLD 104 contrasted with the total lecture classes of WLD 102 and WLD 110. The teaching methods of each instructor may vary with presentation and technique, which can also play a role in the way each student receives instruction. The classroom sizes have also been affected by the previous challenges that the COVID-19 pandemic restrictions have placed on in person learning for 2020-2021. The WLD 105 print reading course has always had student comprehension issues due to the mathematical component and the accommodation of both certificate and diploma students trying to learn the same level of content. The diploma students take an additional Math and English course, where an entrance test is required. This can be a major factor on the overall class results, depending on whether more diploma students are enrolled in this course and other welding courses. We will continue to monitor the content and lectures to accommodate the students with learning challenges, while also maintaining critical and relevant information needed in a welding shop environment. The faculty has uploaded more visual and quiz content into our D2L online learning platform to give students more access to helpful and important information. Overall, the faculty has done a very consistent job at ensuring our students will be able to pass an American Welding Society's weld test and entry level welding knowledge test, upon the completion of our program.

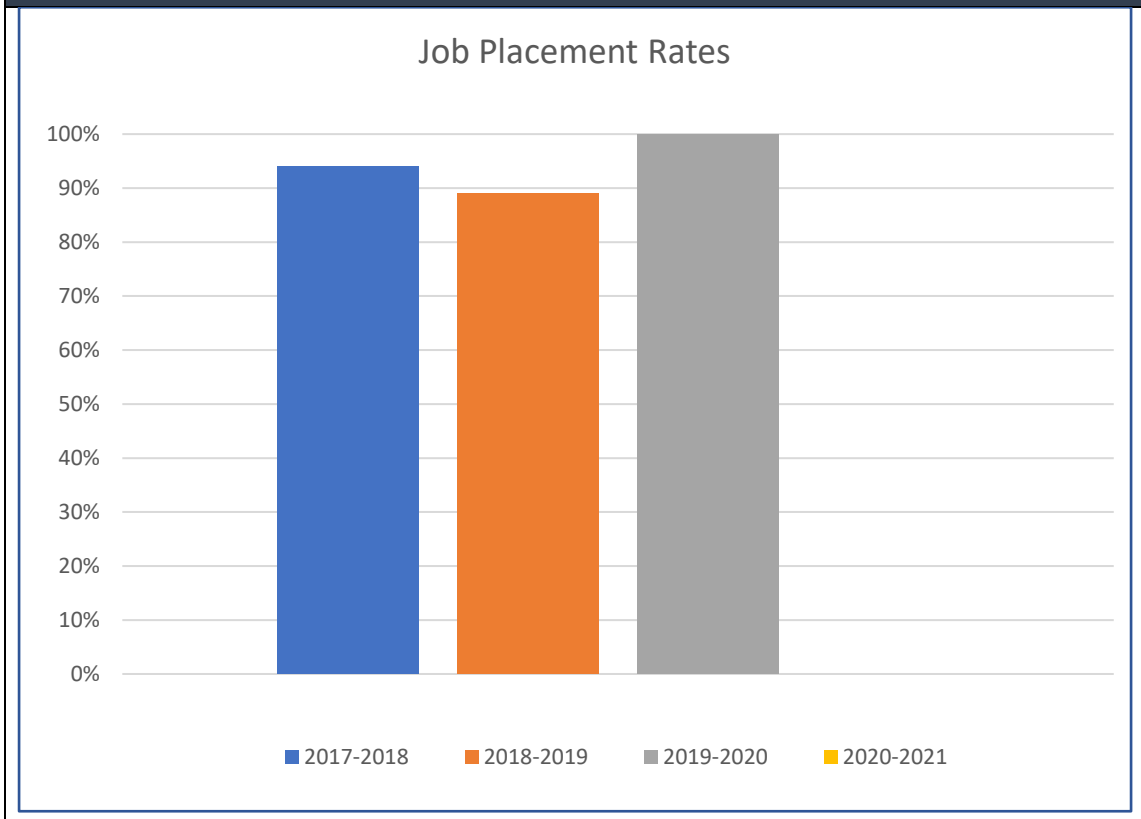
Note: The data for the Welding Diploma and Welding Certificate Programs are very much the same because the only difference between the two programs are the general education and two additional advanced welding courses in the diploma program. Students in the diploma program will be awarded the certificate once they have completed all the academic requirements.

PROGRAM VITAL STATISTICS

Indicator	Trend Analysis	Action Plans
	This trend could be due to a good economy. Most potential students prefer going to work instead of enrolling school. The COVID-19 pandemic has also played a role in the 2020-2021 enrollment.	The faculty plan to make more high school visits and give more welding presentations to potential students.

Indicator	Trend Analysis	Action Plans
	Analyses of the data suggests the drop off of the persistence in 2019-2020 is due to the effects of COVID-19. The laboratory classes were moved to a hydride format for the remainder of the semester.	For the subsequent Summer semester students were given more time to access the welding laboratories to practice and complete the welding required tasks and final weld test.

Indicator	Trend Analysis	Action Plans
	The graduation rate has been very consistent among all welding students from 2017-2021. The data shows most students who reach third semester usually completes the program.	We will continue to distinguish the difference between having a certificate and diploma. We will also stress the overall importance of finishing the program and assist in job placement.

Indicator	Trend Analysis	Action Plans
	The data shows that job placement has been outstanding among our FDTC welding graduates. The economy and statistics have shown a tremendous need for welders in the current and coming years.	Faculty will continue to collaborate with surrounding welding industries to offer graduating students work opportunities locally and nationally.