

CHIPOLA COLLEGE

COURSE SYLLABUS

Chipola's website: www.chipola.edu

COURSE TITLE:

COURSE NUMBER:

Advanced Welder 2

PMT 0076V

COURSE DESCRIPTION (with prerequisites):

Designed to provide students with a comprehensive understanding of Shielded Metal Arc Welding (SMAW), Gas Metal Arc Welding (GMAW), Flux-Cored Arc Welding (FCAW), and Gas Tungsten Arc Welding (GTAW) on ferrous and non-ferrous materials in different positions by AWS D1.1 standard. With a focus on developing practical welding skills, students will learn about welding safety, welding equipment and tools, welding techniques and processes, welding metallurgy, and blueprint reading. In this course, students will gain the practical skills and knowledge required to work as a welder in various industries. Students should have the physical ability to perform welding tasks in cold and hot environments while wearing proper personal protective equipment (PPE) and to lift and carry 60 lbs safely on occasion throughout the day. Prerequisites: completion of PMT 0070V-PMT 0074V; basic Math and reading skills; 150 clock hours.

NAME(S) OF INSTRUCTORS:

Chris Parrish

EFFECTIVE ACADEMIC YEAR:

2023-2024

REQUIRED TEXTBOOKS AND INSTRUCTIONAL MATERIALS:

No textbook or course materials are required to purchase for this course.

Materials provided by instructor

Tool Kit (available in the Welding classroom)

GRADING POLICY:

The standing of a student in each course is expressed by one of the following letters and corresponding grading system:

A - 90 - 100

B - 80 - 89

C - 70 - 79

D - 60 - 69

F - 59 or less

The Chipola Catalog provides policies and procedures regarding the grading system. A student's Grade Point Average is derived from the grading system/quality point scale.

ATTENDANCE AND WITHDRAWAL POLICIES:

Chipola College expects regular attendance of all students, and all instructors record attendance daily. Students who are absent from classes for any reason other than official college activities must satisfy the instructor concerned that the absence was due to illness or other clearly unavoidable reasons. Otherwise, the student may suffer grade loss at the discretion of the instructor. Chipola policy allows each instructor to specify in the Instructor First Day Handout whether or not an absence is excusable and what affect the absence or tardy may have on the grade.

A student is allowed to repeat a course a maximum of three (3) times. On the third attempt a student (1) must bear the full cost of instruction (unless waived by Student Services), (2) cannot withdraw, and (3) must receive a grade.

MAKE-UP POLICY:

Chipola allows each instructor to specify in the Instructor First Day Handout the makeup policy.

ACADEMIC HONOR CODE POLICY:

Students are expected to uphold the Academic Honor Code. Chipola College's Honor Code is based on the premise that each student has the responsibility to (1) uphold the highest standards of academic honesty in his/her own work; (2) refuse to tolerate academic dishonesty in the college community; and (3) foster a high sense of honor and social responsibility on the part of students. Further information regarding the Academic Honor Code may be found in the Chipola Catalog, Student Governance section.

STUDENTS WITH DISABILITIES POLICY:

Chipola College is committed to making all programs and facilities accessible to anyone with a disability. Chipola's goal is for students to obtain maximum benefit from their educational experience and to effectively transition into the college environment. Students with disabilities are requested to voluntarily contact the Office of Students with Disabilities to complete the intake process and determine their eligibility for reasonable accommodations.

NOTICE OF EQUAL ACCESS/EQUAL OPPORTUNITY AND NONDISCRIMINATION:

Chipola College does not discriminate against any persons, employees, students, applicants or others affiliated with the college with regard to race, color, religion, ethnicity, national origin, age, veteran's status, disability, gender, genetic information, marital status, pregnancy or any other protected class under applicable federal and state laws, in any college program, activity or employment.

Wendy Pippen, Associate Vice President of Human Resources, Equity Officer and Title IX Coordinator, 3094 Indian Circle, Marianna, FL 32446, Building A, Room 183C, 850-718-2269, pippenw@chipola.edu.

LIBRARY AND ON-LINE REFERENCE MATERIALS:

The library is a comprehensive learning resource center providing information in print, electronic, and multimedia format to support the educational objectives of the College.

On-line catalogs, e-books and electronic databases can be accessed by using the *LINCCWeb* icon on the Chipola Library website at www.chipola.edu/library. If you have questions about database usage consult the "How to Use the Chipola Databases" on the Library website or call the Library at 850/718-2274 during regular hours. Library hours are posted each semester at the building entrance and on the Library website. See your Instructor First Day Handout for individual instructor recommendations and resources.

TECHNOLOGY RESOURCES:

The college's learning management system is **Canvas**. Classes become available on Canvas on the first day of the semester. It is the student's responsibility to log onto the Canvas system the first day of class to establish the first day of attendance and to check announcements. All official class communication must be through Canvas. For further information, contact your instructor or the Director of eLearning. The Canvas support hotline is available online in live chat and on the phone, toll-free, at 855-308-2812 for any issues in accessing or utilizing Canvas. The **Technology Center**, located in the library, is equipped with computer workstations. Lab hours are posted each semester at the building entrance and on the Library website.

FREE TUTORING RESOURCES:

The <u>A</u>cademic <u>C</u>enter for <u>E</u>xcellence (**ACE**) Lab, located in Building L, offers free tutoring from 8 a.m. to 5 p.m. and is equipped with computer workstations. ACE lab hours are posted each semester at the room entrance and on the website. Additionally, live online tutoring conferences and individual tutoring sessions are available for a variety of courses through ACE@Home. For a conference schedule or to schedule an individual appointment, visit "ACE Tutoring" in the left navigation from any course in Canvas.

ELECTRONIC DEVICE USAGE STATEMENT:

Classrooms should be free of all unnecessary distractions from the task of learning. Therefore, as a general rule, students should silence and avoid use of all electronic devices (laptops, phones, tablets, etc.) not being used for coursework. Consult first-day handouts for any specific policies related to the use of electronic devices in the classroom, as they may vary depending upon the nature of the course or the guidelines of the instructor. Faculty reserve the right to regulate the use of electronic devices and their accessories in class.

DISCIPLINE SPECIFIC COMPETENCIES / LEARNING OUTCOMES:

UPON SUCCESSFUL COMPLETION OF THE COURSE THE STUDENT WILL: 05.0 APPLY EMERGING WELDING TECHNOLOGIES--THE STUDENT WILL BE ABLE TO: 05.01 RESEARCH AND IDENTIFY CAREERS AND WORKFORCE NEEDS THAT EMPLOY EMERGING WELDING TECHNOLOGIES. 05.02 IDENTIFY THE SKILLS REQUIRED TO WORK WITHIN CAREERS THAT USE EMERGING WELDING TECHNOLOGIES. 05.03 APPLY SKILLS AND COMPETENCIES NEEDED TO SUCCESSFULLY USE EMERGING WELDING TECHNOLOGIES SUCH AS, BUT NOT LIMITED TO: PULSE WELDING,

ROBOTICS, SUBMERGED WELDING, ADAPTIVE WELDING, HYBRID LASER-ARC WELDING (HLAW), ETC.

TUNGSTEN ARC WELDING (GTAW) PIPE SKILLS--THE STUDENT WILL BE ABLE TO: 03.01 PREPARE GTAW EQUIPMENT TO CREATE WELDS WITH LOW ALLOY (CARBON STEEL), STAINLESS STEEL PIPE, AND FILLER METAL. 03.02 IDENTIFY AND EXPLAIN OPEN-ROOT V-GROOVE PIPE WELDING TECHNIQUES WITH

AND EXPLAIN OPEN-ROOT V-GROOVE PIPE WELDING TECHNIQUES WITH			
LINKING COURSE-LEVEL STUDENT LEARNING OUTCOMES WITH			
DISCIPLINE-SPECIFIC COMPETENCIES, ASSESSMENT METHODS, AND			
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ARTIFACTS			
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COURSE-LEVEL STUDENT	DIGGIDI INE	ASSESSMENT	
LEARNING OUTCOMES FOR	DISCIPLINE-	METHODS FOR	. = . =
	SPECIFIC	COURSE LEVEL	LEARNING
PMT 0076V	GENERAL	STUDENT	ARTIFACTS FOR
	EDUCATION	LEARNING	AA PROGRAM
	COMPETENCIES	OUTCOMES	ASSESSMENT

05.0 APPLY EMERGING WELDING TECHNOLOGIES--THE STUDENT WILL BE ABLE TO: 05.01 RESEARCH AND IDENTIFY CAREERS AND WORKFORCE **NEEDS THAT EMPLOY EMERGING WELDING** TECHNOLOGIES. 05.02 IDENTIFY THE SKILLS REQUIRED TO WORK WITHIN CAREERS THAT USE EMERGING WELDING TECHNOLOGIES. 05.03 APPLY SKILLS AND COMPETENCIES NEEDED TO SUCCESSFULLY USE EMERGING WELDING TECHNOLOGIES SUCH AS, BUT NOT LIMITED TO: PULSE WELDING, ROBOTICS, SUBMERGED WELDING, ADAPTIVE WELDING, HYBRID LASER-ARC WELDING (HLAW), ETC.the 2-G, 5-G, 6-G positions.

WDG Outcome 1: Demonstrate mastery of Welding knowledge and skills.

WDG Outcome 2:

Demonstrate safety skills appropriate for employees in a Welding work setting.

WDG Outcome 3:

Apply critical thinking/ problem-solving and diagnostic skills proficiency as appropriate for employees in a Welding work setting.

WDG Outcome 4:

Exhibit interpersonal and ethical skills as appropriate for employees in a Welding work setting.

WDG Outcome 5:

Exhibit organizational and professional skills appropriate for Welders.

WDG Outcome 6:

Exhibit employability and/or entrepreneurship skills as appropriate for employees in a Welding work setting.

T, Q, F, SP, SD, Proj, SK.Check

**Assessment Codes

T = Tests Pre/Post = Pre- and Post-Tests **OT** = Objective Tests **UT** = Unit Tests Q = Quizzes **F** = Final Examination **CF** = Cumulative Final

EX = Departmental Exam SE = Nat'l or State Standardized

Exam

RPT = Report/Presentation SP = Skills Performance **SD** = Skills Demonstration **W** = Writing Assignments E = Essays

DE = Documented Essays **RP** = Research papers Jury

R= Recital Proj. = **Projects** Exp. = Experiments Cap. Proj. = Capstone Project Cap. Course = Capstone Course Practicum

Prac. = Intern = Internship H= Homework PS = Problem Solving DB = Discussion Board **BO** = Behavioral Observation Clin. = Clinicals

CS = Case Study CP = Case Plan Port. = Portfolio

Obs. = Teacher Observation Sk. Check = Skills Check-off Curriculum Frameworks

JP = Judged

Performance/Exhibition

MEANS OF ACCOMPLISHING STUDENT LEARNING OUTCOMES:

This course is a cooperative, competency-based learning program with required classroom lecture classes, learning activity guides, videos, handouts, hands-on instruction, DVD, and computer-assisted instruction. Scheduled program workshops, seminars, special assigned projects, and style show attendance is required for credit.

ASSIGNMENT AND/OR COURSE OUTLINE

See your Instructor First Day Handout for individual instructor assignment schedule.