Welding Technology - Advanced (J400410)

Offered at Tom P. Haney Technical College

Length of Program……..……750 hours

Building 8, Room 804

Office Hours: 850-767-5500 ext 212-5147

Welding Instructors:

Paul Richardson	**Zacchae'us Long**	**Colby Estes**
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Class Hours

Class Start Time	**6:45 AM**
Essential Education Group 1	**7:00 AM - 7:15 AM**
Lunch Time	**10:45 AM - 11:30 AM**
Essential Education Group 2	**11:35 AM - 11:50 AM**
Class End Time	**1:30 PM**

PreRequisite:
Students must have completed the Welding Technology program and passed all of the NCCER tests for Core, Level 1 Welder and Level 2 Welder. Students must be able to demonstrate mastery of Flux Core Arc Welding and Shielded Metal Arc Welding on the Industry Standard test. Students must have earned an 80% or higher on Employability skills in the Welding Technology program.

Purpose: The Welding Technology - Advanced certificate program prepares students for careers in the welding industry. Program learning opportunities develop academic, technical, and professional knowledge and skills required for job acquisition, retention, and advancement. Program graduates receive a Welding Technology - Advanced Certificate, have qualifications of a welding technician, and are prepared to take qualification tests required by industry. This program emphasizes welding theory and practical application necessary for successful employment.

Mission Statement:
The purpose of the Welding Technology - Advanced program is to provide training for those who are interested in working in the welding trade. The program is designed to

enable the student to acquire top skills and knowledge he or she will need to compete in today's global market.

Attendance Policy:

- Attendance must be maintained without missing a maximum of 10% of hours.
- Students who arrive after the scheduled time will not be allowed to clock in until 11:30 A.M.

Grading Policy:

Tom P. Haney Technical College considers a grade "C" and below to be below minimum standards for business/industry. A 2.0 cumulative grade point average is required to meet Satisfactory Academic Progress and to graduate.

Grading Scale	**GPA**	
A – 100%-90%	4.0	Exceeds business/industry standards
B – 89% - 80%	3.0	Meets business/industry standards
C – 79% - 70%	2.0	Below desirable business/industry standards
D – 69% - 60%	1.0	Below/industry standards
F – 59% - 0%		Failure

Program Requirement:

- A grade of "B" or higher must be achieved in each occupational course in order to complete the program
- Final grade breakdown
    - Lab Work 40%
    - Academics 30%
    - Employability 30%

Required Materials: include PPE, textbooks, uniform, etc.

- Tools
    - Vise-grip style clamp (models 11sp or 11sr)
    - Stainless steel wire brush
    - Chipping hammer
    - 14" half round file
    - Torch striker
    - Torch tip cleaners (Wypo brand recommended
    - Small flashlight
    - 12' to 25' tape measure
    - Speed square or combination square
    - 4 ½" grinder with non-locking trigger

- PPE
    - Safety Glasses
    - Gloves
    - Jeans or other cotton pants
    - Cotton long sleeve shirt
    - Leather boots with minimum 6” tall (steel toe preferred)

- Textbooks
    - NCCER 6th edition Level 3

Safety Policy:

1. Permission Requirement:

- No individual shall operate or attempt to operate any electrical equipment, appliances,machinery or fixtures within the classroom or lab without explicit permission from the instructors.

2. Instructor Responsibility:

- The instructors shall have the sole responsibility to authorize the operation of any electrical or mechanical devices during instructional sessions.
- Prior to the commencement of any practical activities involving electrical or mechanical equipment, the instructor shall provide clear instructions regarding the proper use, safety precautions, and any necessary permissions required for operation.

3. Prohibited Actions:

- It is strictly prohibited to turn on or manipulate any electrical switches, outlets, or controls unless specifically instructed to do so by the instructors.
- Tampering with electrical systems, attempting unauthorized repairs, or making alterations to electrical connections without proper authorization is strictly forbidden.

4. Safety Measures:

- All individuals present in the classroom shall adhere to established safety protocols and guidelines when interacting with electrical or mechanical equipment.
- Instructors shall ensure that all electrical and mechanical devices and systems are in safe operating condition before allowing their use by students or participants.
- Personal protective equipment must be worn at all times in the welding lab.

5. Awareness and Education:

- The policy shall be communicated to all individuals involved in classroom activities involving electrical and mechanical equipment through orientations, safety briefings, and posted notices.
- Educational resources on electrical safety, including guidelines and best practices, shall be made available to promote awareness and understanding among classroom occupants.

6. Enforcement:

- Non-compliance with this policy will result in disciplinary actions as outlined in the institution's code of conduct or safety policies.
- Any observed hazards, violations, or concerns regarding electrical safety shall be promptly reported to the instructor or relevant authorities for immediate resolution. Conclusion: By adhering to this policy, we prioritize the safety and well-being of all individuals within the classroom environment. Responsible behavior and adherence to established procedures are essential for the prevention of accidents and the promotion of a safe and productive learning environment.

- First Offense: Students will be placed on academic probation.
- Second Offense: Recommended to administration for dismissal from the program

Class Rules:

1. Use proper personal protective equipment (PPE) at all times
2. No cell phone usage including playing music. If caught using a cell phone, you will be sent home and counted absent for the remaining scheduled hours for the day
3. Do not leave the shop without notifying an instructor
4. Work on the task assigned to you
5. Ask instructors for assistance - not another student
6. Students must have ID badges at all times and use the ID badges to sign in/out each for each class session
7. Signing in for another student or having another student sign in/out for you will result in dismissal from the school by administration

<u>Program Courses and requirements</u>

Students must remain on task at all times during the course. All work must be done in accordance with appropriate safety and PPE in mind

This welding course is broken into hours as follows. You will have a project sheet that you will keep and maintain that will help you keep track of your progress. These projects must be completed and turned in on the completed projects table.

Advanced Welder 1 (First 600 Hours):

- Safety and procedures
- **NCCER Tests**
  - SMAW – Open-Root Pipe Welds
  - GMAW – Pipe
  - FCAW – Pipe
  - GTAW – Carbon Steel Pipe
- **SMAW pipe welds** (6010/7018)
  - 2G, 5G, and 6G
- **GTAW Pipe welds** (70s-6/7018)
  - 2G, 5G, and 6G

Advanced Welder 2 (Last 150 Hours):

- **NCCER Tests**
  - GTAW – Low Alloy and Stainless Steel Pipe
  - SMAW – Stainless Steel Plate and Pipe Groove Welds
- **Combo Pipe welds (70s-6/ 7018)**
- **2" Sch 80 stainless pipe**

Industry Certifications

- NCCER credentials are required for course completion. Students must earn the NCCER Level 3 Welding certification.

- American Welding Society (AWS) Certifications
  Based on instructor recommendation, qualified students with passing practical welding tests will be selected to test for the AWS certifications.

Academic Probation Policy (60-Hour Make-Up Period)

In accordance with school policy and the structured demands of the welding program, students who fall behind in their required coursework, project completion, or skills assessments may be placed on academic probation. Academic probation is a focused, time-bound intervention designed to provide students the opportunity to catch up and demonstrate competency in the required learning outcomes.

Duration and Requirements:

- The academic probation period will consist of two weeks, totaling 60 class hours.

- During this time, students are expected to demonstrate dedicated focus and progress toward meeting the course benchmarks and welding skill requirements outlined for their current phase in the program.

- Students on probation must actively engage in completing any outstanding project work, safety modules, or practical demonstrations, including retakes of NCCER tests if necessary.

- Probation is not a break in the educational plan, but a structured extension of instruction and practice, aligned with the competencies expected within each course module.

Expectations During Academic Probation:

- Attendance is mandatory throughout the 60-hour probation period. Any unexcused absences may result in dismissal from the program.

- Students must work under direct supervision, maintain strict adherence to all safety procedures, and use appropriate PPE at all times.

- All probation activities must be relevant to the program's learning objectives, including welding performance standards, safety protocol comprehension, and timely completion of assigned tasks and projects.

- Progress will be evaluated daily, and students must demonstrate clear, measurable improvement to be removed from probation status.

Timeframe for probationary period

- The 60 hour probationary period will begin at 540 hours of Advanced Welder 1

Student Acknowledgment of Receipt and Agreement to Program Syllabus

Welding Technology - Advanced Program

I acknowledge that I have received a complete copy of the program syllabus for the Welding Technology - Advanced program. I have carefully read and fully understand the expectations, policies, requirements, and standards outlined in the syllabus, including but not limited to attendance, conduct, safety protocols, academic performance, and program-specific guidelines. I agree to abide by these expectations and commit to achieving the necessary standards for success in this program. I understand that failure to comply may result in disciplinary action, up to and including dismissal from the program.

Date: _____

Student ID Number: _____

Student's Name (Printed): _____

Student's Signature: _____

(This form should be signed and returned to the instructor on the first day of class. Keep a copy for your records.)