



## Welding Training

The JobsNow “12 in 6” program is an initiative of Gov. Beverly Perdue. This training is geared to help workers quickly (training programs offered over a six month period) learn new skills and re-enter the job market in positions where there are employment needs to be filled.

Funding for this initiative is supported by the American Recovery and Reinvestment Act (ARRA), the Department of Commerce, Division of Workforce Development and the local Workforce Development Board.

JobsNow is a partnership between Guilford Technical Community College and the Guilford County Job Link System.

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### What is the process to participate in this program?

- **Step One:** Individuals interested in the welding training must complete an online “Workforce Investment Act (WIA)” interest application at: [www.guilfordjoblink.com](http://www.guilfordjoblink.com).
- **Step Two:** After submitting an online application, you will be scheduled to attend an information session at the Guilford JobLink Career Center (Greensboro or High Point).
- **Step Three:** Individuals must meet the testing requirements and WIA eligibility criteria for workers who have been laid-off, dislocated, unemployed and under-employed.
- **Step Four:** Individuals meeting the above criteria will be assigned to work with a WIA Career Developer and receive case management services. Financial assistance will be provided to cover the cost of training.

**Please note there is limited space available in this program.**

## Course Description:

### **Welding - SMAW/GTAW / (Stick & Tig)/Plate/Pipe**

This course introduces the student to Shielded Metal Arc Welding (stick) Process and the Gas Tungsten Arc Welding as applied to Surfacing, Fillet, Groove, single and multi-pass welds applied to plate and pipe.

This course will also provide training in welding safety, oxy-fuel and plasma arc cutting, welding symbols, print reading, defects and discontinuities associated with the processes weld quality and out of position welding.

### **Course Outcomes: The successful student will demonstrate proficiency in the following areas.**

1. Practice Safety in the work place.
2. Interpret Welding symbols and basic drawings
3. Identification of Filler metal/Electrodes
4. Identification of the various Defects and discontinuities associated with SMAW/GTAW
5. Identification of SMAW/GTAW equipment and components.
6. Use of Basic hand and power tools.
7. Set up GTAW/SMAW equipment
8. Cut and preparation of various welding joints with OFC and PAC
9. Perform Fillet, and Groove welds in Flat, Horizontal, Vertical and Overhead positions on Plate and Pipe in accordance with AWS D.1.1 and ASME Section IX

### **Program Hours**

Welding Safety	10 hours
SMAW Process/ Components/Theory	10 hours
GTAW Process/Components/ Theory	10 hours
GTAW/SMAW Weld Quality	10 hours
Welding Symbols/Print Reading	30 hours
Weld Sizing/Measurement	10 hours
Welder Training Practices GTAW/SMAW	320 hours
<b>Total</b>	<b>400 hours</b>

This program is designed to prepare the student for employment in the construction field as a combination welder.

**Guilford Technical Community College  
2010 Spring Semester**

*Registration Deadline: January 6, 2010  
Limited space available*

**Course Code:** WLD 3106 JN2  
**Course Type:** Continuing Education Division  
**Start/End Date:** **January 11, 2010 – May 3, 2010**  
(Note: Additional dates for the WorkKeys Assessment and Human Resource Development class dates listed on page four.)  
**Days/Hours:** Monday – Friday 5:00pm – 10:00pm  
**Location:** Jamestown Campus – Davis Hall 118 & Welding Shop  
**Class Size:** Limited enrollment – 16 students  
**Registration Fee:** **\$185.75**  
**Certification Fee:** **\$15.00** - AWS (American Welding Society) Certification  
**Instructor:** Nathan Gray  
**Prerequisites:**

- High school diploma or equivalent
- Basic reading and writing comprehension
- Must be able to withstand physically demanding training involves good manual dexterity
- Should possess visual acuity of 20/20 at 12 inches naturally or corrected
- Candidates should be advised to the extreme heat involved with this training in profession
- Career Readiness Certificate - WIN Locator Assessment – Silver Level

**Book Adoption:** Welding Principles and Applications 6th Edition  
Price **\$140.26 (includes tax)**. Available at the GTCC Jamestown Bookstore.

**Required Supplies:** Welding Supply Kit from the GTCC Bookstore price **\$403.50 (includes tax)**. *This kit includes all of the below tools except the air grinder and side cutters. There will be additional cost for other items listed below.*

### **Required Tool List for Welding Students**

- *THE BELOW TOOL LIST WILL BE DISTRIBUTED ON THE FIRST DAY OF CLASS. IT IS THE RESPONSIBILITY OF EACH STUDENT TO ACQUIRE ALL OF THE TOOLS ON THE LIST.*
- Each student will be given ample time to acquire the tools necessary for shop/lab practices. Students that do not have the necessary tools when lab exercises begin will not be able to perform the required lab/shop practices. **\*Additional cost for these items.**

- Welding Hood \*
- Grinding Shield \*
- Heavy Welding Gloves
- Two 11" Lock Grip Clamps, paddle type ends
- Safety glasses \*
- 4.5" grinder with 5/8" arbor \*
- Hand wire brush\*
- Slag Hammer
- Side cutters
- Air grinder
- Proper attire/ Leather boots/100% cotton shirt/ denim pants /Leather sleeves or jacket \*
- Welders cap is suggested but not mandatory

*These tools and safety equipment are required for all shop/lab exercises. Students not prepared for lab exercises by having all required tools and attire will be absent for the day.*

### **In order to successfully complete this program:**

- Students must meet required grading standards and the attendance policy.
- Students must earn a Silver Level – Career Readiness Certificate

CRC/WorkKeys Testing Date: May 4, 2010 - @ 5pm,  
Jamestown Campus, Business Hall Building Room 009 (basement level).

- Students will need to complete the required Human Resource Development course work involving 24 hours of instruction. This component is scheduled for:

Start/End Date:	May 5, 6, 7, 10,11th
Days/Time:	Mon. – Fri.; 5:00pm – 10:00pm
Location:	Jamestown Campus, Business Hall Building Room 009