

WELDING 101

AWS Educational Facility

2011 Catalog

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Welding 101^{LLC} is authorized by the Tennessee Higher Education Commission. This authorization must be renewed each year and is based on an evaluation by minimum standards concerning quality of education, ethical business practices, health and safety, and fiscal responsibility.

I. About Welding 101^{LLC}

History

In January 2008, Welding 101^{LLC} was established as a reaction to the acute need for highly trained and skilled welders in Tennessee. Occupational employment projections reveal an overwhelming necessity for both highly skilled and experienced welders and instructors. At Welding 101^{LLC}, we provide our students with experienced and qualified instructors, small classes, hands on training, and flexibility. The programs have been designed to allow a person with many years of welding experience to take a certification test quickly or a person with little welding experience to learn how to become a quality welder certified by the internationally recognized American Welding Society.

Our Philosophy

Welding 101^{LLC} is committed to:

- Making welding training available to all
- Help students develop marketable welding skills through quality training at a reasonable cost
- Developing new and better welding training methods and materials

Mission Statement

The mission of Welding 101^{LLC} is to prepare individuals for a career opportunities and lifelong success in the field of welding by instilling competence and expertise in the student; allowing them to compete in the world job market. We are committed to offering a high quality educational experience in a compassionate and respectful environment.

Purpose and Objective

Welding 101^{LLC} is concerned about the overwhelming demand for qualified welders. The United States Department of Labor predicts over 200,000 skilled personnel shortage by 2010 with the gap increasing by 2014. Welding 101^{LLC} is prepared to help fill the gap between the employment demands and the supply of qualified welders.

Facility

Welding 101^{LLC} has two locations.

The Lebanon, TN facility features 20 welding booths for hands-on experience. The booths are equipped with the latest power sources, inverters, DC Rectifiers, AC/DC combination units, and a custom-designed welding table for all-position welding; positional and fixture. In addition to the 20 welding booths, there are two air-conditioned classrooms, office, kitchen/break room, metal storage area, library, and a welding supply store. Ample parking is provided. Classes offered are as follows: Entry Level Welder, Advanced Welder, and Hobby. Hours of operation are Monday through Thursday 8:00 a.m. to 8:00 p.m. There is a staff member on hand at all times to answer any questions you may have.

The Clarksville, TN satellite facility offers the same as the primary school in a smaller scale. It has 10 welding booths equipped with the latest power sources and custom-designed welding table for all-position welding, positional and fixture. Classes offered are as follows: Entry Level Welder, Advanced Welder, and Hobby. The site is open on Tuesdays and Thursdays from 2:00 p.m. through 7:00 p.m. For more information about registration for this facility contact the Lebanon facility at 615.453.8651.

Welding 101^{LLC} is authorized by the American Welding Society (OC4) to perform qualification of welders in accordance with the AWS QC7 certification program.

Welding 101^{LLC} is authorized by the Tennessee Higher Education Commission.

Welding 101^{LLC} qualifies operators to the procedures defined by the following codes: AWS, ASME, API, and MIL Specs.

Memberships

Welding 101^{LLC} is an Educational Member of the American Welding Society at the advanced level for the SENSE program. Each member of the Welding 101^{LLC} teaching staff is a member in good standing of the American Welding Society.

II. Admissions and Financial Information

Enrollment Requirements

- Applicants must be 16 years of age or older. Anyone under 18 years of age must have a letter of consent from their parent or legal guardian.
- Applicants need to be in good physical condition, be able to lift 50 pounds, and have good motor skills.
- Applicants should be able to speak English. Foreign speaking students will be accepted only if they provide an interpreter.
- Applicants shall be able to read and write adequately to pass a written test.
- Applicant must provide a copy of high school diploma, GED, or ATB test scores.

Admissions Procedures

To apply for admission, applicants should contact the school for an appointment to tour the facility and meet with an instructor. Family and friends are welcome and encouraged to visit Welding 101 ^{LLC} with the applicant. During the tour, an instructor will be available to discuss admission requirements and to answer any questions pertaining to enrolling. At this time, an information packet including all enrollment forms, school catalog, disclaimers, and deadline for deposit will be available for applicants to take with them for review. Upon receiving the completed forms and deposit from the student, the school will notify the applicant of their standing with the next available class.

Workbook and Supplies

Workbooks and supplies can be purchased in the supply store of Welding 101 ^{LLC}. Purchasing the supplies from Welding 101 ^{LLC} is not a requirement; they can be purchased at any welding supply store. However, students must have their own supplies to begin training. Books are not returnable and fees are subject to change without notice.

Registration Fees

A non-refundable registration fee of \$100.00 is due 10 days prior to commencement of classes. It will be used to reduce tuition after the student is accepted into the program. All registration, tuition and book fees must be paid prior to the start date of class. **Students will not be allowed to attend class until proper payment is confirmed.** Payment methods accepted are: cash, check, money order, and approved credit card. Welding 101 ^{LLC} offers in house financing at a 6% annual percentage rate, ask an admission representative for more information. For companies or agencies sponsoring students, the testing facility will invoice against purchase orders. Purchase orders must accompany the agreement/enrollment form.

Students will be charged a \$25 fee for any checks returned due to insufficient funds, or similar problems.

Tuition rate

Tuition rate is based on \$12 per contact hour. ****Tuition fees are subject to change without notice****

Total Contact Hours:	<i>Entry Level Welder:</i>	336
	<i>Advanced Welder Program:</i>	448
Tuition Cost:	<i>Entry Level Welder:</i>	\$4032
	<i>Advanced Welder Program:</i>	\$5376
Program Materials (books, welding bag, tools, jacket, hood, etc.):		
	<i>Entry Level Welder:</i>	\$350 + Tax
	<i>Advanced Welder Program:</i>	\$600 + Tax
Total Cost:	<i>Entry Level Welder:</i>	\$4414.37
	<i>Advanced Welder Program:</i>	\$6031.50

Cancellation and Refund Policy

Rejection: An applicant rejected by the school is entitled to a refund of all monies paid.

Three-Day Cancellation: An applicant who provides written notice of cancellation within three (3) business days, excluding weekends and holidays, of executing the enrollment contract is entitled to a refund of all monies paid, excluding the \$100 non-refundable registration fee.

Withdrawal Procedure:

- A. A student choosing to withdraw from the school after the commencement of classes is to provide a written notice to the Director of the school. The notice must include the expected last date of attendance and be signed and dated by the student.
- B. If special circumstances arise, a student may request, in writing, a leave of absence, which should include the date the student anticipates the leave beginning and ending. The withdrawal date will be the date the student is scheduled to return from the leave of absence but fails to do so.
- C. A student will be determined to be withdrawn from the institution if the student falls below the required attendance after being placed on Attendance Probation. (See Student Catalog for details)
- D. All refunds will be submitted within 45 days of the determination of the withdrawal date.
- E. If a student has attended more than 55% of the program, no monies will be refunded and any open balance loan contract will be due in full at the time of withdrawal.

Class Rescheduling

If an emergency arises after a student has paid for training and testing, Welding 101 will mediate the problem and allow the student to reschedule the class at no extra cost. No refunds will be provided. A student rescheduling classes for this reason will have to wait for an opening in the class to complete the training. After completing the training, a student will be able to apply for further training at the current application fee.

III. Student Regulations

Personal Conduct

All participants are expected to conduct themselves in a respectable manner at all times. Misconduct such as fighting, use of illegal drugs or alcohol, or carrying of weapons, deliberate damage, theft or any vandalism to tools, equipment or facilities will not be tolerated and will result in dismissal. **During class, cellular phones and pagers are to be turned off.** Appropriate time will be allotted throughout the course for conducting personal business. Welding 101 phones are for company business and therefore should not be used for personal calls.

Criminal Activity

Students are to report to the instructor or director any criminal activities taking place on Welding 101 property; this includes all school functions. Welding 101 will report any criminal activities to the proper authorities.

Personal Property

Welding 101 does not assume responsibility for the loss of books or other personal property. All articles found or turned in will be kept for 30 days and then become the property of Welding 101 and are subject to re-sale.

Children / Pets on School Grounds

Children or pets are **NOT** allowed to accompany a student to class or to be left unattended on Welding 101 property. Welding 101 assumes no liability for injuries incurred by minors or pets while on the premises.

Student Grievance Policy

When a grievance occurs the student should first try to resolve the issue with the individual involved. If the student is then unsatisfied with the results they should personally submit written complaint to the Director and schedule an appointment to discuss the complaint. If the grievance is not resolved to the student's satisfaction within fifteen (15) days, the student may forward the grievance to:

The State of Tennessee Higher Education Commission
404 James Robertson Parkway, Suite 1700
Nashville, Tn. 37243-0830
(615)741-5293

IV. Academic Policies and Procedures

Types of Training

Welding 101 can arrange the following types of training:

- Welding skills training designed to teach actual welding techniques and manipulative skills in all major arc welding processes,
- Technical training designed to teach the theory of welding and related subjects through short courses for technical and management personnel,
- Customized field training designed to solve specific performance problems at any location worldwide,
- Specialized training designed to train personnel for specialized welding needs. Training is conducted at Welding 101 by special arrangement.

Training Methods

Welding training is skills-based, and is continually updated to reflect the best industrial practices. We follow specific performance objectives and programs are designed to meet specific criteria for each phase of training. We use five proven strategies to teach welding:

- Lecture/discussion with audio visual aids to introduce key concepts
- Demonstrations to model proper techniques
- Supervised individual practice with one-on-one instructor coaching to give students an opportunity to incorporate new skills
- Systematic practical and written testing to insure that students have mastered key concepts and skills
- Weld testing

Class Size

For training, class size is 5 - 10 students per instructor. When field training is involved the numbers may be higher if the company requests our services.

Schedule / School Calendar 2011- 2012

New Program begins every four weeks; enrollment is open up to 10 days prior to commencement of classes.

Classes are held Monday through Thursday;

Morning Session: 8 am to 11:30 am, **Evening Session:** 6 pm to 9:30 pm.

Dates of Importance:

2011:	May: 30 th Memorial Day
	July: 4 th Independence Day
	September: 5 th Labor Day
	November: 24-25 th Thanksgiving Holiday
	December: 19-31 st Christmas Holiday
2012:	January: 2 nd First day of classes

Student Withdrawal Procedure

Students who wish to withdraw from a course or program are required to notify the director in writing. Notification should include students full name, date of intention to withdraw and reason for withdrawal.

Leave of Absence Policy

In the event of an accident, death in the family, surgery or long illness, students can request in writing a leave of absence not to exceed a total of sixty (60) days whether taken continuous or separate. If the student does not return to the school at the end of the requested time period and fails to contact the school, the student will be terminated from the program at which time the schools refund policy will be in effect.

Advising

Faculty and staff are readily available to advise students in their academic progress. In the event that a student should need additional assistance for matters that are beyond academic or training issues, referrals for outside counseling are available. Welding 101 is not a placement agency however, works closely with local placement agencies to assist students in finding employment after completion of program.

V. Program Description

1. AWS Entry Level Welder (Level 1)

The objective of the Entry Level 1 Welder program is to provide students with the knowledge, attitude, skills and habits required to gain employment in the welding and metal fabricating industry as an AWS Certified Entry Level Welder. Level 1—Entry Level Welder has been designed to allow the student to choose an area of concentration in a particular welding process. Each student has to complete two required courses as well as two chosen welding process class to achieve qualifications for the AWS certificate. Students have the option to add additional welding endorsements upon completion of the program.

Entry Welder Level 1 Program

Required Classes

		Hours
REQ 1	Safety and Thermal Cutting This course will provide instruction on welding safety and Oxyfuel (Oxygen & Acetylene) welding and cutting. Emphasis will be placed on the hazards of working around different types of metals, gasses that welders work with on a daily bases, and mobile equipment guidelines and requirements for transporting gases. Practical applications of Oxyfuel welding, Oxyfuel cutting, soldering and brazing will set the foundation for almost all welding occupations. Emphasis will be placed on safety, and proper operation of the oxyacetylene torch.	56
REQ 2	Welding Drawings and Quality This course will provide instruction on: <ul style="list-style-type: none">• Reading and interpreting welding prints, mechanical drawings, assembly drawings, detail drawings, and practical mathematics for welders. Emphasis is placed on Orthographic Projection, line types, and welding symbols.• Welding Procedure Specifications and the Welder Performance Qualifications tests for the most common of welding procedures. An examination of various welding procedure specification (WPS), welding test positions and the testing involved will prepare the student for performance qualification testing.	84
Welding Processes (student to choose two from following processes)		
SMAW	Shielded Metal Arc Welding (SMAW) This course will provide instruction on Shielded Metal Arc Welding (SMAW), also known as stick welding. Student will receive instruction on the welding equipment, setup and adjustments as well as hands-on training. The student will have completed numerous hours of welding in the flat, horizontal, vertical and overhead positions affording them the ability to take a performance qualification test.	98
GMAW	Gas Metal Arc (GMAW) This course will provide instruction on Gas Metal Arc Welding (GMAW), also known as Metal Inert Gas Welding (MIG). Students will receive instruction on the setup and operation of GMAW equipment and perform welds of various joints in the flat, horizontal, vertical and overhead positions.	98
FCAW	Flux Cored Arc Welding (FCAW) This course will provide instruction on Flux Cored Arc Welding (FCAW). Students will receive instruction on the setup and operation of Flux Cored Arc Welding equipment and perform welds of various joints in the flat, horizontal, vertical and overhead positions.	98
GTAW	Gas Tungsten Arc Welding (GTAW) This course will provide instruction on Gas Tungsten Arc Welding (GTAW), also referred to as Tungsten Inert Gas Welding (TIG). Students will receive instruction on the welding equipment, setup and adjustments as well as hands-on training for welding in various positions and different types of metals.	98
Total Hours		336

Students have the option to add additional welding endorsements upon completion of the Entry Level Welder Program.

2. Advanced Welder Program

Students who wish to enroll in the Advanced Welder Program at Welding 101 must have completed the initial Pre – Enrollment Checklist (attached) as well as Completion of Entry Level Welder Program (ELWP) **or** be able to pass Shield Metal Arc Welding (SMAW) 3G and 4G test and a visual GTAW coupon.

Welding 101 will operate and train under the American Society of Mechanical Engineering (ASME) and American Petroleum Institute (API 1104).

This program provides the student with extensive practice in the preparation and welding pipe.
Program consists of:

- Safety procedures in preparation of and welding of pipe.
- Proper technique for preparing a pipe for welding.
- Welding pipe using Gas Tungsten Arc Welding (GTAW) and Shield Metal Arc Welding (SMAW).
- Preparing pipe for a welding test.

Advanced Welder Program Classes

		Hours
AWP 1	Pipe Fitting techniques of pipe fitting using 90’s, T’s, Flanges, and reading pipe blue prints and sketches. Students are required to pass a written exam and a performance evaluation.	112 hours Basic
AWP 2	SMAW 2G/5G Carbon Steel Perform (SMAW) with 6010 and 7018 electrodes on open root plate and pipe in the 2G and 5G positions. Students are required to pass visual and guided bend test on 6” SCH 40 pipe welded in the 2G and 5G positions.	112 hours
AWP 3	GTAW 2G/5G GTAW Root / SMAW cover 2G – 5G perform (GTAW) on open root plate and pipe with 7018 electrode fill and cap in the 2G and 5G positions. Students are required to pass visual and guided bend test on 6” SCH 40 pipe welded in the 2G and 5G positions.	112 hours
AWP 4	GTAW / SMAW 6G Perform quality single V-groove welds of pipe in the 6G position using the GTAW and SMAW processes. Students will be required to pass a visual and guided bend test on 2” SCH 80 pipe in the 6G position.	112 hours
Total Hours		448

Completion Requirements

AWS will issue a certificate for trainees who have successfully completed the program. The Record of Successful Completion must be completed showing:

- Passing score on the written safety examination (100%)
- Passing score on the general knowledge (75%)
- Written examination of the results of inspection of the workmanship samples

The Record of Successful Completion will be submitted to AWS for each student that successfully completes the program.

Transfer of Credits

Welding 101 does NOT recognize previous credits granted for education, training or experience. Also, training earned at Welding 101 will NOT transfer to other institutions.

VI. Program Syllabus

Attendance

Because of the intensive nature of this program, **attendance is mandatory**. All absences, late arrivals and early departures are recorded and become part of the student's permanent record. If circumstance prevents attendance at a particular class, prior notification is expected. Any absence without pre-approval or proof of extenuating circumstances (doctor's excuse, death in immediate family, etc.) can result in attendance probation or possible dismissal from Welding 101. To receive credit for full-time, students are required to attend a minimum of 90% for each program. If a student falls below 90% attendance, he/she will be placed on attendance probation for thirty (30) days. Any unexcused absences or tardiness during the 30 day probationary period will result in the student's dismissal. **It is the student's responsibility policy can result in grade reduction, attendance probation, or dismissal.**

Attendance Probation Policy

If a student falls below the required 90% attendance, he/she will be placed on attendance probation for thirty (30) actual school days at which time if the student is absent three (3) consecutive days or a total of five (5) days during the probation period, the student will be terminated. Repeat tardiness or early departures will not be tolerated; three days tardy / early departures will be counted as one day absent. Be on time for your scheduled class.

Make-up Policy

Students are accountable for all work missed during an absence. All make-up work is at the discretion of the instructor and will be handled on a case-by-case basis. All make-up work must be completed within one week of the absence.

Grading and Progress Standards

Progress is measured at the end of each module within the program by achieving a minimum average of 75% on written quiz/test and passing one (1) certification. All scores and grades are maintained and placed in students permanent files. If at any time a student feels that additional time is needed to successfully complete a process and/or is having difficulty understanding the material, an instructor will be available to work with the student for additional training during and /or after school hours. Welding 101 does not allow incompletes, repetition of courses within the program or remedial courses.

Academic Probation Policy

Students who fail to maintain a 70% accumulative grade average on all five grade determining factors and fail to achieve a minimum of one (1) certification at the end of each module within the program shall be placed on academic probation for a period of one (1) week. During probation, the student will be required to work individually with an instructor during and / or after class time to meet the minimum requirements. If a student fails to meet the minimum requirements within three attempts or two (2) weeks, whichever comes first, student will be terminated from enrolled program.

Grade Determination

Course requirements include evaluation in the areas of work ethic (including attendance), homework/class assignments, quizzes, lab/shop assignments, skill assessments and examinations as follows:

Grade determining factors:

<i>Work Ethic*</i>	10%
<i>Class Assignments*</i>	15%
<i>Quizzes*</i>	20%
<i>Lab/Shop Assignments*</i>	20%
<i>Examination (s)*</i>	35%
<i>Total</i>	100%

Grading Scale:

93 – 100	A
85 – 92	B
77 – 84	C
70 – 76	D
00 – 69	F

Factors continued. . .

Certification Tests

<i>Pass with no defects</i>	A
<i>Pass with one (1) acceptable defect</i>	B
<i>Pass with two (2) or more acceptable defects</i>	C
<i>Fail RT test</i>	D
<i>Fail Visual test</i>	F

Work Ethic: This portion of the grade includes evaluation of self-directed work habits such as: attendance, class preparedness, and communication.

Homework/Class Assignments: Homework will be assigned and are due upon commencement of class on assigned date. This program will provide instruction on general safety, welding shop safety and safe handling procedures for heavy metals, hot and sharp metals. Students will be graded on class participation of discussions in a classroom setting.

Lab/Shop Assignments: Students will conduct various types of exercises under the supervision of the instructor who will shadow and assist/correct them when necessary to achieve the proper outcome.

Skill Assessment: Students will be given installation assessment that will be variations of the lab/shops. In this type of skill, the student will not receive any help from the instructor. This evaluation will test students to see how much information they have retained as well as their mechanical, analytical and reasoning skills.

Examinations: This course has a comprehensive AWS final examination, which may or may not include a mid-term exam. There is NO make-up of examinations missed.

Dress Code

Students are required to comply with OSHA regulation in the shop area. ALL STUDENTS are required to wear safety glasses, long pants, shirt (no tank tops), hard soled work shoes or boots and sometimes gloves. ALL CLOTHING must fit properly and maintain the appropriate accessories to be considered safe. Failure to comply with the dress code will result in the student not being able to participate in the assignment, a grade of zero will be earned, and student will be sent home.

Additional Information

Students should wear older clothing that could possibly be damaged or soiled when participating in an assignment in the lab/shop area. **Pagers and cell phones or other electronic devices are NOT allowed in the classroom or lab/shop area.**

Placement Assistance

Welding 101 is NOT a placement agency. However, we do work closely with local agencies (ONIN Staffing and TA Staffing) that specialize in skilled labor placements. It is up to the student to pursue the job possibilities in which they have been informed.

Statement of Assurance of Compliance with Equal Opportunity Laws

Welding 101 hereby agrees that it will comply with Title VI of the Civil Rights Act of 1964 (42 U.S.C. 2000d et seq.), Title IX of the Education Amendments of 1972, as amended (20 U.S.C. 1681 et seq.), Section 504 of the Rehabilitation Act of 1973 (29 U.S.C. 794), the Age Discrimination Act of 1975 (42 U.S.C. 6101 et seq.), and all Federal regulations adopted to carry out such laws. This assurance is directed to the end that no person in the United States shall, on the ground of race, color, national origin, (Title VI), handicap (Section 504), sex (Title IX, in education programs and activities only), or age (Age Discrimination Act) be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity of the Signatory receiving Federal financial assistance or other benefits under statutes administered by VA (Department of Veteran Affairs), the ED (Department of Education), or any other Federal agency. This assurance applies whether assistance is given directly to the recipient or indirectly through benefits paid to a student, trainee, or other beneficiary because of enrollment of participation in a program of Welding 101.

VII. Organization, Faculty and Staff

Instructors and Staff

Welding 101 employs a teaching staff with numerous years of combined, practical welding experience. Their experience includes industry, construction, military and education. Instructors are qualified in all the welding processes they teach and they are dedicated to teaching the welding trade and welding related activities. Their schedules have been developed to insure that they spend the maximum time possible working with enrolled students. The instructors are as follows:

Rodney A Patterson, Jr.

Owner/Director/CWI / CWE
AAS Business Management and Human Resources
Volunteer State Community College
20 years experience in Welding and Fabrication
Certified Welder
Rodney is Director over Welding 101, both locations.
He is serving as Lead Instructor at the Clarksville Facility, as well.

Steve Peterson

CWI
25+ years experience in Welding and Fabrication
Certified Welder
Steve is Lead Instructor at the Lebanon, TN Facility

Advisory Committee

Bobby O'Neal
World Testing CWI/Owner

Larry Edmonson
Volunteer Welding Supply Sales Representative

Richard Gibbs
A-L Compressed Gases Owner

Officers

Rodney A. Patterson Jr.
President/Director

Mary A. Allison
Assistant Director
Mary is at the Lebanon, TN Facility.