Course Syllabus for WLDG 1457
INTERMEDIATE SHIELDED METAL ARC WELDING
Spring 2017 Section 43004
WLDG 1457-43004
INTERMEDIATE SHIELDED METAL ARC WELDING
Spring 2017 Course Syllabus

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COURSE DESCRIPTION: WLDG1457 is a WECM course number. WLDG 1428: A study of the production of various fillets and groove welds and preparation of specimens for testing in all test positions. 4 Credits (2 LEC-6 LAB) Prerequisite: NONE

WECM'S END-OF-COURSE OUTCOMES: Identify principles of arc welding; describe arc welding operations of fillet and groove joints; explain heat treatments of low alloy steels; and explain weld size and profiles; prepare test plates; perform fillet welds in the overhead position; perform air carbon arc weld removal; perform bevel groove welds with backing plates in various positions; and demonstrate use of tools and equipment.

The instructor will conduct the learning situation through lecture, and lab demonstrations. Competencies will then be required and checked off as they are accomplished.

CLASS MEETING TIME & PLACE: Monday through Thursday 1:00 PM - 5:00 PM. Lecture and Labs will be held in T190.


REQUIRED WELDING EQUIPMENT/TOOLS: WLDG 1428, 1457, 2443: Shielded Metal Arc Welding Safety Glasses, Welding Hood (shade 10), Pliers, Leather Welding Gloves, Chipping Hammer, Cutting Goggles or Shade 5 Face Shield, Ear Plugs or Muffs, Vise Grips and a Wire Brush. Students Enrolled in any of the Shielded Metal Arc or Advanced classes should also purchase a 6’ Tape Measure and a 4 ½” Angle Grinder that includes a twisted wire wheel, a twisted wire cup brush, two grinding rocks and an 80 grit or finer sanding (flapper) disc.

EXPECTATIONS: Students must come to class prepared to learn. Students should bring appropriate supplies to class each day and have available the following items: required welding tool/equipment, proper clothing (PPE), book, writing utensil, permanent marker, paper, safety glasses, and a school ID. Do not expect to borrow supplies from other students or staff.

SAFETY is a major part of this program. PPE – PERSONAL PROTECTIVE EQUIPMENT / PROPER CLOTHING MUST BE WORN IN THE LABS WHILE WELDING: long pants without cuffs or fraying, long sleeved shirt preferably with flaps over the pockets, leather boots, gloves, eye protection, and hearing protection. Safety Glasses must be worn in the labs at all times.

Students will participate in a “hands on approach” to achieve successful completion of multiple competencies. Students watching other classmates work and “just hanging out” will in most of all circumstances not be given any credit and could be asked to leave. Likewise, students will be expected to be “on task” in the labs and in the classrooms focusing on their learning opportunities. Reading magazines, newspapers or sleeping during class is unacceptable. You should also refrain from bringing laptops to class because they also provide too many opportunities for distractions. Student’s bringing either cell phones or pagers into class must have them either turned off during lecture and lab, or set to vibrate. If it is critical that you must respond to page or phone call, you must leave the classroom to do so. A pay phone is available in the lobby.

MANDATORY: WELDING STUDENTS will read Chapter 2 and answer the Safety Quiz from the lab manual to qualify them to work in the welding lab.
HAZARDOUS MATERIALS: All students in this class have the right to know that they may be working with, or in the presence of, hazardous materials. A list of specific materials and the Material Safety Data Sheets describing the chemical and physical properties of each is kept in the Tool Room. The instructor will deliver an orientation on the safe use and disposal of hazardous materials and waste. Students are advised to consult the instructor before using, mixing, or disposing of any chemicals or materials with which they are not familiar. Students will be trained and tested on the safe handling of these materials.

DISTRICT ATTENDANCE POLICY: You are expected to attend all classes and are responsible for your attendance. If at any time, you wish to drop this course and receive a grade of "W" you must initiate that action yourself by going in person to Admissions, Counseling, or the Division Office, and filling out the necessary form. INSTRUCTORS CANNOT AND WILL NOT DROP A STUDENT FROM ANY CLASS. The student must initiate this action. The last day to withdraw from any class this semester and receive a grade of "W" is April 12, 2017. If you do not withdraw by this date, you will receive a performance grade based on the criteria contained in this syllabus.

COURSE PARTICIPATION: You must attend and participate in your on-campus or online course(s) in order to receive federal financial aid. Your instructor is required by law to validate your attendance in your on-campus or online course in order for you to receive financial aid. You must participate in an academic related activity pertaining to the course but not limited to the following examples: initiating contact with your instructor to ask a question about the academic subject studied in the course; submitting an academic assignment; taking an exam; completing an interactive video; participating in computer-assisted instruction; attending a study group assigned by the instructor; or participating in an online discussion board about academic matters relating to the course. In an online course, simply logging in is not sufficient by itself to demonstrate academic attendance. You must demonstrate that you are participating in your online class and are engaged in an academically related activity such as in the examples described above. Failure to do so will prevent you from being certified and will affect your financial aid.

GRADING AND ATTENDANCE POLICY: Grades or evaluation of welding skills will be achieved through a series of weld tests using standard evaluation procedures for each welding process. The student is responsible for their quality of performance and is expected to do his or her own work. Each student will be evaluated upon the basis of participation and performance, and will be awarded a grade accordingly. Written exams will also be utilized in determining knowledge of the subject matter.

*Completion of all welding skill objectives will be worth 70 points or 70% of your grade.
*The knowledge part of welding will be given additional emphasis by making it worth 20 percent of your grade for a total of 20 points. Points will be earned from doing the end of chapter Lab Manual Quizzes plus you can expect additional testing throughout the semester.

* We believe that there are additional attributes other that being able to perform quality welds that we want our students to develop and demonstrate. Attitude and Effort are two of the most notable attributes that we want our students to exhibit in a positive manner. Superior Attendance, Attitude, Class Participation, Time Management, Safety and Clean-up will be expected and recognized by being valued at 10% of a student’s grade. Each student will start the semester with 10 points and will then be given deductions as required. Typically, one point will be deducted at a time for infractions until the points are used up.
*Potentially, An additional 10 points can be obtained after the skill objectives are completed by doing two quality projects that utilize the process in which the student has been practicing to master. Students should discuss in advance with their instructor what they plan to build and how much each might be worth (up to 5 points each).

Students are expected to attend all classes. Each unexcused absence will cost students 1 point each. Every 3 tardies will cost students 1 point each. Students will have 20 minutes of each class to use for breaks as needed during the lab time (6:00 PM-10:00 PM). They are welcome to take their break anytime during the lab as needed but will still be responsible for all that is covered and all that is expected. Class is scheduled and will take place from 6:00 PM to 10:00 PM.

Roll may and will be taken at any time during class and usually more than once.
- If you are not present during roll, you are absent.
- If you come to class after roll is taken you must report to me to get the absence changed into a tardy.
- An absence will not be changed into a tardy any time after class.
- If you leave early or take an extended break during class it will cost you no less than a tardy.
- Tardies will only be given when a student misses less than 20 minutes of lecture, additional lab or clean up time.
- If you show up late and leave early, you will receive an absence for the day.

Final letter grades will be given for the corresponding number grade ranges:

A = 100-90       C = 79 -70       F = 64 - 0
B = 89-80        D = 69 -65
GRADING EXAMPLE:

All welding skill objectives completed will be worth 70% of your grade.  
Chapter Quizzes plus any additional knowledge test will be worth 20% of your grade.  
Attendance, Safety, Clean-up etc… will be worth 10% of your grade.  
Two projects can be done once objectives are completed and will be worth up to 5 bonus points each.  

Max total up to 110 pts. = A++

STOP BEFORE YOU DROP RULE: Effective 2007, section 51.907 of the Texas Education Code applies to students who enroll in a Texas public institution of higher education for the first time in fall 2007 or later. Based on this law, DCCCD or any other Texas Public institution of higher education may not permit students to drop more than six courses during their entire undergraduate career. All college-level courses dropped after the official drop and add period for the course are included in the six-course limit, including courses dropped at another Texas public institution of higher education, unless it qualifies as an exception.

EMERGENCY ALERTS:

As a Dallas County Community College District student, you will receive an alert when an emergency occurs on your campus. Alerts are sent by email, as required by state law, when an unscheduled evacuation or closure of a DCCCD campus or office occurs because of bad weather, utility outages, police emergencies or other types of emergencies. Previously, you did not receive alerts unless you requested them. Under that "opt-in" system, you had to sign up to receive alerts. DCCCD has launched a new "opt-out" system. Our new opt-out system automatically will send alerts to your email address unless you specifically "opt out" by informing us that you do not want to receive alerts.

HOW TO UPDATE YOUR EMAIL, REQUEST PHONE OR TEXT ALERTS OR OPT OUT

We send alerts to the email address you provided to us when you registered for classes, so if your email address has changed since you registered, be sure to update it. Here are the steps you should follow to update your email address. You can use these same steps to add a phone number or a text number to receive messages for DCCCD Emergency Alerts or to "opt out" if you don't want to receive these alerts:

1. Log on to eConnect (https://econnect.dcccd.edu/eConnect/eConnect).
2. Under "My Personal Information," click on "DCCCD Emergency Alerts" (it's the second link down). You'll then see the Emergency Notification Information page.
3. Update your emergency email address, if necessary. Add your phone number (to receive a recorded phone call) and your text number (to receive a text message) if you want to receive alerts by those methods. Or, if you do not want to receive any alerts, choose the "Opt Out" selection.
4. Click "Submit." Log off.

IMPORTANT NOTE: Updating your emergency alerts email address does not update the email address on file in your student record. You can update your student record email address online through eConnect's "Change Email Address" link or through your college registrar's office. After you sign up for text alerts, following the steps listed above, our new vendor, Blackboard Connect, will input your text-enabled phone number into the system. Blackboard Connect will automatically send a text message to your mobile phone to confirm your request.

There is no charge to receive emergency alerts by text. However, standard text message charges from your cell phone provider will apply.

Find out what our emergency alerts look like by going to this Web page: http://www.dcccd.edu/SS/OnlineSys/EmrgAlerts/Pages/AlertsLookLike.aspx

Need more information? See our DCCCD Emergency Alerts Web page at http://www.dcccd.edu/Alerts.

WRITING EXPECTATIONS: In completing homework assignments, you must write out the questions and answers in complete legible sentences. No abbreviations or short words.

RELIGIOUS HOLIDAYS/OBSERVANCES: Students who will be absent from class for the observance of a religious holiday must notify the instructor in advance. Please refer to the college catalog section on Student Responsibilities.

REPEATABILITY ISSUE:

Effective for Fall Semester 2005, the Dallas County Community Colleges will charge a higher tuition rate to students registering the third or subsequent time for a course. All third and subsequent attempts of the majority of credit and Continuing Education/Workforce Training courses will result in higher tuition to be charged. Developmental Studies and some other courses will not be charged a higher tuition rate. Third attempts include courses taken at any of the Dallas County Community Colleges since the Fall semester of 2002. The current rate is an additional $50.00 charged for each credit hour. For complete information and updates, go to: http://www.dcccd.edu/ThirdCourse Attempt/.
INCOMPLETE: Grade I (Incomplete)
An incomplete will not be granted automatically and will only be granted under the severest of circumstances. Be realistic about your schedule. If you cannot handle the workload, adjust your schedule to what you are able to manage.

FINANCIAL AID STUDENTS: If you are receiving Financial Aid grants or loans, you must begin attendance in all classes. Do not drop or stop attending any class without consulting the Financial Aid Office. Changes in your enrollment level and failing grades may require that you repay financial aid funds. Failure to contact the instructor will result in your name being submitted to the Financial Aid Office as a “non-attendee.” All students receiving financial aid must open an Email account through email. Directions for opening email accounts in email can be located below in this syllabus under STUDENT E-MAIL.

ATTENDANCE VERIFICATION FOR FINANCIAL AID: Attendance is based on your participation in this class. Failure to participate may result in your financial aid award being reduced or eliminated. You are responsible for confirming the accuracy of your attendance record.

STUDENT E-MAIL: Faculty and students must have and use a DCCCD account for all correspondence relating to academic coursework. Legal privacy issues prevent your instructor from discussing your work or your grades on commercial e-mail accounts. If you wish to send your papers as attachments to an e-mail (and the instructor permits it), or if you have a question about your grade, you must open a student e-mail account. All students receiving financial aid must open a student email account. The account is free. You may set it up by going to www.dcccd.edu and click on Student email or https://www1.dcccd.edu/SS/OnlineSvs/Pages/MSOffice.aspx

PRINTING ON CAMPUS: Printing in the Computer Lab (L-108), Library, and Academic Skills Center will cost 10 cents a page. Students must bring a $1.00, $5.00, $10.00, or $20.00 bill to the lab to create an account. Accounts must be created before attempting to print. No change is made in the lab. Once the money is in the bill acceptor, it cannot be retrieved. Cash refunds are not possible. Accounts stay active as long as the account has value.

STUDENT CODE OF CONDUCT: The district’s policies and procedures for the student code of conduct will be followed in all Welding Technology classes and can be found at https://www1.dcccd.edu/cat0910/ss/code.cfm. The Welding Technology program has additional program specific expectations of our students. These will be documented within the given syllabus and will require a signature from each student showing their understanding and willingness to comply.

ACADEMIC HONESTY: Scholastic dishonesty is a violation of the Code of Student Conduct. Scholastic dishonesty includes, but is not limited to, cheating on a test, plagiarism, and collusion. As a college student, you are considered a responsible adult. Your enrollment indicates acceptance of the DCCCD Code of Student Conduct published in the DCCCD Catalog at https://www1.dcccd.edu/cat0910/ss/code.cfm. The purpose of the Student Code of Conduct is to provide guidelines for the educational environment of the Dallas County Community College District. Such an environment presupposes both rights and responsibilities. Disciplinary regulations at the college are set forth in writing in order to give students general notice of prohibited conduct. Students should be aware of disciplinary actions for all forms of academic dishonesty, including cheating, fabrication, facilitating academic dishonesty, plagiarism, and collusion.

PLAGIARISM: Plagiarism is formal work publicly misrepresented as original; it is any activity wherein one person knowingly, directly, and for lucre, status, recognition, or any public gain resorts to the published or unpublished work of another in order to represent it as one’s own. Work shall be deemed plagiarism: (1) when prior work of another has been demonstrated as the accessible source; (2) when substantial or material parts of the source have been literally or evasively appropriated (substance denoting quantitative matter denoting qualitative format or style); and (3) when the work lacks sufficient or unequivocal citation so as to indicate or imply that the work was neither a copy nor an imitation. This definition comprises oral, written, and crafted pieces. In short, if one purports to present an original piece but copies ideas word for word or by paraphrase, those ideas should be duly noted.

INSTITUTIONAL EQUITY
The Office of Institutional Equity, in coordination with DCCCD colleges, has the primary responsibility for reviewing, updating and implementing compliance policies and procedures. The Institutional Equity and Compliance Officer and the Office of Institutional Equity will ensure compliance with College District policies, federal and state laws related to sexual assault, Title IX, Title II (Americans with Disabilities Act) and the Military Veterans Full Employment Act to support diversity and inclusion.
STUDENTS WITH DISABILITIES
If you are a student with a disability and/or special needs, or if you think you may have a disability, please contact the college Disability Services Office (DSO). Please note that all communication with DSO is confidential. If you are eligible for accommodations, please provide or request that the DSO send your accommodation letter to me as soon as possible (students are encouraged to contact DSO at the beginning of the semester). For more information regarding the College Disability Services Office, please visit the Student Services website: https://www.dcccd.edu/SS/OnCampus/DisSvs/DisSvsOffices/Pages/default.aspx/ or contact DCCCD Office of Institutional Equity at (214) 378-1633. College Disability Services Office 972-860-8348

A NOTE ON HARASSMENT, DISCRIMINATION AND SEXUAL MISCONDUCT
We are committed to assure all community members learn and work in a welcoming and inclusive environment. Title VII, Title IX and DCCCD policy prohibit harassment, discrimination and sexual misconduct. If you encounter harassment, sexual misconduct (sexual harassment, sexual assault, stalking, relationship violence, stalking), retaliation or discrimination based on race, color, religion, age, national origin, disability, sex, sexual orientation, gender identity, and/or gender expression, please contact your College Title IX Coordinator or the Office of Institutional Equity. We treat this information with the greatest degree of confidentiality possible while also ensuring student welfare and college safety.

We are concerned about the well-being and development of our students, and are available to discuss any concerns. There are both confidential and non-confidential resources and reporting options available to you. If students wish to keep the information confidential, please contact the college Counseling or Student Health Services. As required by DCCCD policy, incidents of discrimination and/or sexual misconduct shared with faculty will be reported to the College Title IX Coordinator or District Title IX Coordinator. The Title IX Coordinator will contact the student and determine if further investigation is needed. For more information about policies, resources or reporting options, please contact your college Title IX Coordinator or visit www.dcccd.edu/titleIX.

Eastfield
972-860-7358

College Title IX Coordinator
Rachel Wolf
TitleIX-EFC@dcccd.edu

District Title IX Coordinator
LaShawn Grant
TitleIX-District@dcccd.edu

EMERGENCY/INCLEMENT WEATHER PROCEDURE: In the event of inclement weather, be sure to check your email and/or the campus website. Also, register to receive emergency alerts via text messaging and/or email. Lastly, familiarize yourself with the campus emergency operations plan. (Video best watched in Internet Explorer).

FAMILY EDUCATIONAL RIGHTS AND PRIVACY ACT OF 1974 (FERPA): In compliance with the Family Educational Rights and Privacy Act of 1974 (FERPA), the College may release information classified as “directory information” to the general public without the written consent of the student. Directory information includes: (1) student name, (2) student address, (3) telephone numbers, (4) date and place of birth, (5) weight and height of members of athletic teams, (6) participation in officially recognized activities and sports, (7) dates of attendance, (8) educational institution most recently attended, and (9) other similar information, including major field of student and degrees and awards received. Students may protect their directory information at any time during the academic year. If no request is filed, directory information is released upon written inquiry. No telephone inquiries are acknowledged. No transcript or academic record is released without written consent from the student, except as specified by law.

IMPORTANT NOTICE: This syllabus is subject to change for the benefit of the educational process and its students at any time during the semester. Small changes may be given verbally while major changes will likely be documented with written addendums.
## Spring Academic Semester, 2017

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
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<tbody>
<tr>
<td>January 3 (T)</td>
<td>College Buildings and Offices Open -- staff and administrators return to work.</td>
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<tr>
<td>January 9 (M)</td>
<td>Faculty Reports</td>
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<tr>
<td>January 16 (M)</td>
<td>Martin Luther King, Jr. Day Holiday</td>
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<tr>
<td>January 17 (T)</td>
<td>Classes Begin</td>
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<tr>
<td>January 30 (M)</td>
<td>12th Class Day</td>
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<tr>
<td>February 23 (R)</td>
<td>TCCTA Faculty mtgs./Regular work day for employees. Day and evening classes will not meet.</td>
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<tr>
<td>February 24 (F)</td>
<td>TCCTA/Professional Development Day -- Faculty only. Regular work day for staff and administrators. Friday day classes will not meet. Friday evening, Saturday and Sunday classes will meet.</td>
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<tr>
<td>February 27 (M)</td>
<td>Classes Resume</td>
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<tr>
<td>March 13-17 (M-F)</td>
<td>Spring Break -- College buildings and offices will be closed for the week.</td>
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<tr>
<td>March 20 (M)</td>
<td>Classes Resume</td>
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<tr>
<td>April 12 (W)</td>
<td>Last Day to Withdraw</td>
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<tr>
<td>April 14 (F)</td>
<td>Holiday</td>
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<tr>
<td>April 17 (M)</td>
<td>Classes Resume</td>
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<tr>
<td>May 5 (F)</td>
<td>Last class day for spring.</td>
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<tr>
<td>May 8-11 (M-R)</td>
<td>Final Exams</td>
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<tr>
<td>May 11 (R)</td>
<td>Semester Ends</td>
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<tr>
<td>May 15 (M)</td>
<td>Last Day for faculty to submit grades electronically through eConnect to the Registrar's Office</td>
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Shop Safety, Personal Behavior, and Cleanliness Expectations

The overall safe operation and appearance of the welding classroom/laboratory is the responsibility of the instructor and the students for the semester in which the classroom/laboratory is being utilized for instruction. In an effort to maintain a professional appearance and enhance the safety of students and personnel within the department, the following will be adhered to at all times.

1. **Safety Glasses must be worn to protect your eyes at all times while in the labs. No safety glasses – No lab time!**

2. Students will only be allowed to work in the labs after successfully completing all safety training and when supervised by the instructor or lab assistant. Instructors will tour the lab area with students pointing out safety equipment, emergency equipment and hazardous waste disposal receptacles. **Do not enter the lab unless an instructor is present.**

3. Do not attempt to operate equipment until properly trained and authorized. All safety guards must be in place and in proper working order. Do not use any tool not in proper working condition or for any other purpose than that for which it was intended. Report unusual noises and unsafe conditions.

4. Students should be appropriately dressed for working in the welding industry. All articles of jewelry should be removed before operating equipment.

5. Horseplay and running in the lab is dangerous and will not be permitted.

6. **Report all injuries, accidents or unsafe conditions to the instructor.**

7. Know the location and proper use of firefighting equipment.

8. Welding, painting and other operations requiring specialized safety gear will not be done without wearing this gear and shall be restricted to the designated areas for those operations.

9. All combustibles and flammables must be properly stored. Keep the lids on the trash cans when they are not being filled.

10. All chemicals, liquids, etc., will be disposed of in the proper receptacle in accordance with E.P.A., State and local mandates. Anyone violating these mandates will be subject to disciplinary action.

11. No smoking in the lab or surrounding areas. This is a smoke free campus. Smokeless tobacco will also not be allowed in the labs.

12. No offensive language.

13. No cell phone interruptions during class or labs.

**Cleanliness**

*End of each lab period:* the instructor will supervise students in the following:

- a. All shop equipment will be returned to the designated storage area or the tool room.
- b. All loose pieces will be picked up off the floor/benches and stored in the proper place.
- c. Bench tops will be cleaned and made ready for the next lab. Grind spatter, welds, etc… from the tables with the appropriate grinder.
- d. Cables and hoses will be rolled up and/or placed on their machines/hooks or in store room.
- e. All grinding grit, flux, dirt, used electrodes, dust, etc., will be cleaned from the floors. This should include sweeping dust and dirt into a dust pan, putting it into the trash, and wiping up any spills.
- f. Place scrap metal and electrode butts in appropriate bins.
- g. Removal of all trash, soda cans, food wrappers, etc.

*End of week:*

- a. The shop will be thoroughly cleaned and prepared for the following week.
- b. All spare pieces will be properly stored or disposed of. **DO NOT** leave pieces in the lab between classes without permission from an instructor.
- c. All bench tops will be cleaned and ground.
- d. All shop equipment used will be cleaned and made ready for the next week of classes.
- e. Any shop equipment in need of repairs will be brought to the attention of the Instructor.
WLDG 1457

STUDENT LEARNING OUTCOMES

At the end of the term the student should be able to:
A. Demonstrate how to use each of the following electrodes: E6010, E6011, E6012, E6013, EE7014, E7018, and E7024 electrodes
B. Test and operate SMAW equipment.
C. Set up current and polarity on the SMAW equipment.
D. Prepare a quality weld on 3/8” V-grooved steel with 100% penetration.
E. Prepare and demonstrate how to weld in the horizontal position.
F. Prepare and demonstrate how to weld in the vertical position.
G. Prepare and demonstrate how to weld in the overhead position.
H. Correctly select the proper electrode, polarity and amperage to make quality welds for a variety of joints and positions.

Each student will be responsible for accomplishing the following welding objectives. These tasks will ensure students have mastered the learning outcomes set for the class.

1. Make a passing grade on the Chapter 2 Welding Safety Quiz from the Lab Manual.
2. Make a passing grade on the Chapter 6 Advanced Shielded Metal Arc Welding Quiz (Parts A-C).
3. Make a passing grade on the Chapter 20 Testing and Inspection of Welds Quiz (Parts A-C).
4. Read AWS chart to determine correct setting for Shielded Metal Arc Welding
5. Correctly set up Shielded Metal Arc Welding Equipment.
6. Identify weldable and non-weldable materials.
7. Clean and prepare the metal for welding: fit, align, and clamp as required.
8. Identify porosity and inclusion and their causes.
9. Use proper (CLAMS) current, length of arc, angle of electrode, manipulation of electrode and speed or rate of travel to produce quality welds using Shielded Metal Arc Welding in accordance to AWS standards.
10. Make quality Root Pass Welds on Plate with a Backing Strip in all positions utilizing Shielded Metal Arc Welding and instructor selected electrodes to AWS standards. Test by cutting plate and inspecting the cross section for good fusion at the edges.
11. Make multiple pass filler welds on a V-Joint in all positions utilizing Shielded Metal Arc Welding and instructor selected electrodes in accordance to AWS standards. Test by cutting perpendicular to the welds and inspect the cross section for good fusion without any issues of porosity or slag inclusion.
12. Utilize Welding Procedure Specifications (WPS) on Practice 6-7 to make quality Multi Pass Welds on a V-Grooved plate with a Backing Strip in all positions utilizing Shielded Metal Arc Welding and instructor selected electrodes to AWS standards. Visually inspect the welds for uniformity and other discontinuities. If the weld passes the visual inspection, then it is to be prepared and Guided Bend Tested according to the “Guided Bend Test” section of Chapter 20 on pages 527-530. Repeat as necessary until both weld specimens pass the test.
13. Utilize Welding Procedure Specifications (WPS) on Practice 6-8 to make quality Multi Pass Welds on a V-Grooved plate without a Backing Strip in all positions utilizing Shielded Metal Arc Welding and instructor selected electrodes to AWS standards. Visually inspect the welds for uniformity and other discontinuities. If the weld passes the visual inspection, then it is to be prepared and Guided Bend Tested according to the “Guided Bend Test” section of Chapter 20 on pages 527-530. Repeat as necessary until both weld specimens pass the test.
14. Make quality weld joints on 2 – 4” pipe utilizing Shielded Metal Arc Welding in accordance to AWS standards in multiple positions using instructor selected electrodes.
15. Identify the causes of burn through, lack of penetration, porosity, incomplete fusion, excessive spatter, distortion and waviness of the beads and make the necessary adjustments.
Eastfield College
Parking Requirement

Any vehicle which is owned by a customer, or student that parks his/her vehicle within the confines of the fence surrounding the Technology Building, or parks inside the shop for one night or more must have a current (paid) workorder in force at all times and a key to the vehicle must be in the hands of the tool room personnel. Otherwise, you will be ticketed and eventually towed. To enable the workorder to be in force, you must as a student/customer contact the Toolroom personnel in T-152. They will fill out the workorder, and you must pay the shop fee at the business office, and return the pink receipt to them before the workorder is valid. Once you have paid, they will give you a green workorder copy that you will display on you dashboard top making it easy to see. At the end of each semester, vehicles are required to be removed until they are once again established next semester for the work to be done. Vehicles that are not moved will have to have written permission from an instructor/tool room coordinator to remain. Otherwise, the tool room personnel will call to alert you that your vehicle will be towed. This will occur within one week after the close of the semester. All fees used to remove the vehicle will be the responsibility of the owner of the vehicle.

Park only in designated areas. Do not park inside the center courtyard between the overhead doors. If your vehicle is parked there, it will be moved in any way possible. Do not park opposite the dumpster in the crossed out zone. Do not park in front of overhead doors unless you have been told to do so.

To enable your vehicle to have a valid (paid) workorder, you will have to pay a shop fee. This is the policy of the college; it has nothing to do with your lab fees that are paid toward your tuition. These fees begin at $5.00 and other larger jobs will increase this fee to the maximum of $25. This fee is non-refundable except possibly in the case where no work is done on the vehicle. If you choose to not pay the fees, you will not work on the car until you have, and if you are parking within the confines of the fence you will ticketed or towed. Your signature at the bottom of this page indicates that your fully understand the information given you above.

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Learning Objectives Check Off Chart

As a student I realize the welding lab utilizes a progress chart (Learning Objectives check off sheet) to identify welds and/or individual skills each student works to master. It therefore will also show each students progress throughout the semester. I understand the benefits of using this as a tool to track both my progress and more importantly to guide me towards the successful development of my skill set for the class which I signed up.

I ____________________________________________ give my permission to include my name on the Learning Objectives check off sheets and to chart my progress throughout this semester.

A second option available for any of our students is to have their own progress sheets which will insure more anonymity. The students will need to keep up with it, get it checked off as they make progress and then meet with their instructor to transfer their documentation onto the instructors official grade report on a bi-weekly basis.

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I have also completely read the Shop Safety, Personal Behavior and Cleanliness Expectations and believe that the rules will help to improve the safety of students, the public and the personnel within the department while maintaining a professional atmosphere and appearance. Therefore, I will follow those guidelines and will do my part to make our welding program the best that it can be.

Signature of Student

Printed Name

Class enrolled

Date