

El Paso Community College

Syllabus

Part II

Official Course Description

SUBJECT AREA	<u>Machining Technology-Welding</u>						
COURSE RUBRIC AND NUMBER	<u>WLDG 1457</u>						
COURSE TITLE	<u>Intermediate Shielded Metal Arc Welding (SMAW)</u>						
COURSE CREDIT HOURS	<table border="0" style="margin-left: auto; margin-right: auto;"> <tr> <td style="text-align: center;"><u>4</u></td> <td style="text-align: center;"><u>2</u></td> <td style="text-align: center;"><u>4</u></td> </tr> <tr> <td style="text-align: center;">Credits</td> <td style="text-align: center;">Lec</td> <td style="text-align: center;">Lab</td> </tr> </table>	<u>4</u>	<u>2</u>	<u>4</u>	Credits	Lec	Lab
<u>4</u>	<u>2</u>	<u>4</u>					
Credits	Lec	Lab					

I. Course Description

Studies the production of various fillets and groove welds. Prepares specimens for testing in various positions. Emphasizes development of multi-pass welding techniques. **Prerequisite: WDLG 1407. (2:4). Lab fee.**

II. Course Objectives

- a. Identify principles of arc welding
- b. Demonstrate use of tools and equipment
- c. Describe arc welding operations of fillet and groove joints
- d. Explain heat treatments of low alloy steels
- e. Explain weld size and profiles
- f. Prepare test plates
- g. Perform fillet welds in the overhead position
- h. Perform bevel groove welds with backing plates in various positions

III. THECB Learning Outcomes (WECM)

1. Identify principles of arc welding.
2. Describe arc welding operations of fillet and groove joints.
3. Explain heat treatments of low alloy steels.
4. Explain weld size and profiles.
5. Prepare test plates.
6. Perform fillet welds in the overhead position.
7. Perform air carbon arc weld removal.
8. Perform bevel groove welds with backing plates in various positions.
9. Demonstrate use of tools and equipment.

IV. Evaluation

The knowledge and skills stated in the objective must be demonstrated by the students in the form of tests and assignments in order to complete the course. Test (50%) and lab assignments (50%) will be averaged, letter grades will be arranged as follows:

90-100	A
80-89	B
70-79	C
60-69	D
0-59	F

Students should be able to compute their grade average anytime during the course. Missed assignments and make-up tests will be given at the discretion of the instructor.

V. Disability Statement (American with/Disabilities Act [ADA])

EPCC offers a variety of services to persons with documented sensory, mental, physical, or temporary disabling conditions to promote success in classes. If you have a disability and believe you may need services, you are encouraged to contact the Center for Students with Disabilities to discuss your needs with a counselor. All discussions and documentation are kept confidential. Offices located: VV Rm C-112 (831-2426); TM Rm 1400 (831-5808); RG Rm B-201 (831-4198); NWC Rm M-54 (831-8815); and MDP Rm A-125 (831-7024).

VI. 6 Drop Rule

Students who began attending Texas public institutions of higher education for the first time during the Fall 2007 semester or later are subject to a 6-Drop limit for all undergraduate classes. Developmental, ESL, Dual Credit and Early College High School classes are exempt from this rule. All students should consult with their instructor before dropping a class. Academic assistance is available. Students are encouraged to see Counseling Services if dropping because exemptions may apply. Refer to the EPCC catalog and website for additional information.