# El Paso Community College Syllabus Part II Official Course Description

SUBJECT AREA	Machining Technology-Welding
COURSE RUBRIC AND NUMBER	WLDG 1457
COURSE TITLE	Intermediate Shielded Metal Arc Welding (SMAW)
COURSE CREDIT HOURS	4 2 4
	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	В
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.

Revised by Discipline: Fall 2015 (next revision in 3 years)