

El Paso Community College
Syllabus
Part II
Official Course Description

SUBJECT AREA	<u>Machining Technology-Welding</u>
COURSE RUBRIC AND NUMBER	<u>WLDG 1327</u>
COURSE TITLE	<u>Welding Codes and Standards</u>
COURSE CREDIT HOURS	<u>3 3 1</u> Credits Lec Lab

I. Course Description

Provides an in-depth study of welding codes and their development in accordance with structural standards, welding processes destructive and nondestructive test methods. Emphasizes symbols, and the practical implementation of AWS D1.1, APL 1104 and ASME welding codes. Hands-on lab includes preparation for welder certification. (3:1).

II. Course Objectives

- a. Categorize major codes
- b. Identify welding procedures
- c. Identify welding and NDT symbols
- d. List responsibilities of inspectors
- e. Evaluate post weld heat treatments and destructive testing
- f. List alloys/phases of metals and state effects of heating and cooling
- g. Apply preweld, in-process and shop inspection standards
- h. Develop welding procedures
- i. Calculate preheat and postweld heat treatments
- j. Identify NDT test methods and welding discontinuities

III. THECB Learning Outcomes (WECM)

1. Categorize major codes.
2. Identify welding procedures.
3. Identify welding and NDT symbols.
4. List responsibilities of inspectors.
5. Evaluate postweld heat treatments and destructive testing.
6. List alloys/phases of metals.
7. State the effects of heating and cooling.
8. Apply preweld, in-process, and shop inspection standards.
9. Develop welding procedures.
10. Calculate preheat and postweld heat treatments.
11. Identify NDT test methods and welding discontinuities.

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.