COURSE INFORMATION FORM

DISCIPLINE WELD

COURSE TITLE Thermal Cutting Processes Lecture

CR.HR 1 LECT HR 1 LAB HR  CLIN/INTERN HR.  CLOCK HR. 

CATALOG DESCRIPTION:
Student will develop the knowledge required of thermal cutting processes. Emphasis will be placed on manual and mechanized oxy-fuel cutting, plasma arc cutting, and air-carbon arc cutting.

PREREQUISITES
WELD 110 or take concurrently

EXPECTED STUDENT OUTCOMES IN THE COURSE (ESO)

Upon completion of this course, the student will be able to:
1. Relate oxy-fuel, plasma, and air-carbon arc safety to various cutting operations.
2. Select the correct tips and/or accessories for given oxy-fuel, plasma, and air-carbon arc applications.
4. Describe and select the correct gases used with oxy-fuel, plasma, and air-carbon arc processes.
5. Identify and describe minor repairs/servicing done by the welding technologist.

GENERAL EDUCATION OUTCOMES (ESO)

Specify which general education outcomes, if any, are substantially addressed by the course. Numbers in parentheses identify the Expected Student Outcomes linked to the specific General Education Outcome.

Life-Long Learning: Attributes of an awareness of the convergence of knowledge
2. Apply learned skills to real world interactions  (1-5)

Quantitative Literacy and Mathematical Analysis
F. Interpret and apply numeric information presented in tables, charts, and graphs  (2)
PROGRAM-LEVEL OUTCOMES

CAREER AND TECHNICAL EDUCATION PROGRAM OUTCOMES
Specify which Career and Technical program outcomes, if any, are substantially addressed by the course by completing the “Career and Technical Education template” to show the relationship between course and program outcomes to assessment measures.

None

CLASS-LEVEL ASSESSMENT MEASURES
Student accomplishment of expected student outcomes will be assessed using the following measures. (Identify which measures are used to assess which outcomes.)

1. Formative and summative written examinations (1-5)
Individual instructors may order this outline as fits the needs of their individual courses. In addition, they may place more emphasis on some areas than on others. What is assured is that this particular list is covered in the course. Other topics may be added to a course as the instructor sees fit, and as time and interest allow. An *asterisk can be used to mark an item as optional.

I. Safety
   A. Oxy-fuel manual and mechanized cutting and manual gouging
   B. Plasma arc cutting
   C. Air-carbon arc cutting and gouging

II. Tip selection and accessories
   A. Oxy-fuel manual and mechanized cutting and manual gouging
   B. Plasma arc cutting
   C. Air-carbon arc cutting and gouging

III. Procedures for proper use
   A. Oxy-fuel manual and mechanized cutting and manual gouging
   B. Plasma arc cutting
   C. Air-carbon arc cutting and gouging

IV. Process gases
   A. Oxy-fuel manual and mechanized cutting and manual gouging
   B. Plasma arc cutting
   C. Air-carbon arc cutting and gouging

V. Minor repairs and servicing
   A. Oxy-fuel manual and mechanized cutting and manual gouging
   B. Plasma arc cutting
   C. Air-carbon arc cutting and gouging