# WEL 130 Inert Gas Welding

#### **COURSE OUTLINE**

## **Prerequisites:**

WEL 120

## Course Description: (must be word-for-word from the College Catalog)

WEL 130 Inert Gas Welding (3 CR) Prerequisite: WEL 120 or divisional approval. Introduces practical operations in the uses of inert-gas-shield arc welding. Discusses equipment, safety operations, welding practice in the various positions, process applications, and manual and semi-automatic welding. Lecture 2 hours. Laboratory 3 hours. Total 5 hours per week.

Semester Credits: 3 Lecture Hours: 2 Lab/Recitation Hours: 3 WEL 130

## **Course Outcomes**

#### At the completion of this course, the student should be able to:

Introduces practical operations in the uses of inert-gas-shield arc welding. Discusses equipment, safety operations, welding practice in the various positions, process applications, and manual and semi-automatic welding.



## **Class Name and Number**

## Required Materials:

Safety Glasses (must be worn at all times while in the lab)
Proper shade lens and hood for welding process
All other personal protective equipment

Textbook: Modern Welding 11<sup>th</sup> Edition ISBN 978-1-60525-795-2

The following supplementary materials are available:

- 1.
- 2.
- 3.



## **WEL 130**

Topical Description: (Outline chapters and sections to be covered in the book – may include timeline)

WEEK 1 Introduction to GMAW

Lab: Introduction and Identification

WEEK 2 Lesson 9 A Handout

Lab: Create a stringer bead and build a pad

WEEK 3 Lesson 9 A Handout

Lab: Create a stringer bead and build a pad

WEEK 4 Lesson 9 B Handout

Lab: Job 9 C-1 Handout

WEEK 5 Lesson 9 B Handout

Lab: Job 9 C-1 Handout

WEEK 6 GMAW Safety from Chapter 9

Lab: Job 9 C-2 Handout

WEEK 7 Test One

Lab: Job 9 C-2 Handout

WEEK 8 Lesson 9 B-1 Handout

Lab: Job 9 C-3 Handout

WEEK 9 Chapter 9 Correct torch movement for position

Lab: Job 9 C-3 Handout

WEEK 10 Lesson 9 C Handout

Lab: Job 9 C-4 Handout

WEEK 11 Test Two

Lab: Job 9 C-4 Handout

WEEK 12 Handout

Lab: Job 9 C-5 Handout

WEEK 13 Handout

Lab: Job 9 C-6 Handout

WEEK 14 Lab Projects

Lab: Begin Vertical weld position

WEEK 15 Lab Projects

Lab: Continue Vertical weld position

WEEK 16 Final Exam

All Job sheets are due at the end of each class.



# **Class Name and Number**

Notes to Instructors (List information about optional topics, departmental exams, etc)

1.



### Revised Semester/Year

- 2.
- 3.
- 4.

