MOHAWK VALLEY COMMUNITY COLLEGE

UTICA-ROME, NEW YORK

# COURSE OUTLINE

I. CATALOG DESCRIPTION:

MT270 Welding Procedures for Mig and Tig C-2, P-6, Cr-5

This course covers the theory and use of TIG (Tungsten Inert Gas) and MIG (Gas Metallic Arc) welding, including non-ferrous and ferrous metals in all positions. Topics include plasma welding, cutting, and safety procedures. Welding supply fee required.

Prerequisite: MT174 Electric Arc Welding Procedures

II. MATERIALS:

Text: Welding Skills B.J. Moniz and R.T. Miller 4th edition

III.COURSE OBJECTIVES:

This course is designed to provide the student who already acquired proficiency in Electric ARC Welding with the fundamentals of Gas Welding. This will include an understanding of the theory of Gas shielding and knowledge of the different gases that are used for this. Emphasis will be placed on different types of G.M.A.W. processes and the different types of equipment required for each. Instruction will be provided in the weldability of metals, welding-related processes and evaluation and quality control.

Student learning outcomes**:**

1. Student will be able to identify the fundamentals of Gas Welding.
2. Student will be able to identify the weld ability of metals, welding-related processes and evaluation and quality control.
3. Students will be able to demonstrate their knowledge of GMAW and GTAW in a oral presentation to the rest of the class.
4. Students will be able to identified non ferrous and ferrous using a magnet or finding melting point.
5. students will be able to give disadvantages and advantages on a Venn diagram to show likeness and differences.
6. Students will be able to safety set up, shut down and know all safety features of the two machines.

IV.DETAILED COURSE OUTLINE:

### Information and

Week Reading Assignment Task Detail

1 & 2 Chapter 7 Safety GTAW&GMAW

Test your knowledge

Supplies/equipment

Quiz

Chapter 8 GTAW positions/test your knowledge

Research

3 & 4 Chapter 9 Test your knowledge/readings

Chapter 23 Pipe and Tube welding/test your knowledge

Test

5 & 6 Chapter 21 Special Ferrous Applications/test your

. Knowledge Quiz and readings

7 & 8 Chapter 22 Special NON Ferrous Applications/questions

## 

9 & 10 Chapter 28 Metal Properties and Identification/test

Your knowledge/questions

1. 11-13 Chapter 33 Getting and holding a job in welding/resumes/ Questions

14 & 15 Chapter 25 Exam/Automatic Welding/Robotic

# **COURSE NAME:\_\_\_\_\_MT270 Welding Procedures for Mig and Tig\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

## **DATE FACULTY NAME CHANGE INPUT MEASUREMENT ASSESSMENT ACTION**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |