

# **Wayne County Community College District**

# **COURSE SYLLABUS**

**WLT106** 

**Welding Fabrication** 

**CREDIT HOURS: 3.00** 

**CONTACT HOURS: 45.00** 

#### **COURSE DESCRIPTION:**

In this course, emphasis will be on the development of fabrication techniques, including design, mock-ups, material selection, layout, grid, material preparation and use of fixtures. Welding skills developed in WLT101, WLT103, WLT104 and WLT105 will be applied. There will be an opportunity for students to further investigate other industrial welding processes.

PREREQUISITES: WLT 101, WLT 103, WLT 104, WLT 105

#### **EXPECTED COMPETENCIES:**

Upon completion of this course, the student will be able to:

- Complete a fabrication project
- Make usage of a weld fixture to alter a part or fabricate part from a blueprint
- Use a layout table effectively
- Understand layout theory to fabricate a project with 100% accuracy
- Use a grid and layout for fabrication purposes
- Understand the use of measuring tools such as height gage, calipers, micrometers, scribes, automatic center punch metric American scales, power tools such as cutting wheels and grinders to help with fabrication with 100% accuracy
- Understand tolerance, warpage and distortion
- Understand proper use of the brake press for fabrication, creating metal pieces for fabrication, and bend allowance
- Understand how to review, check a part and indicate the importance of an inspection department

## **ASSESSMENT METHODS:**

Student performance may be assessed by examination, quizzes, case studies, oral conversation, group discussion, oral presentations. The instructor reserves the option to employ one or more of these assessment methods during the course.

### **GRADING SCALE:**

90%-100% = A 80%-89.9% = B 70%-79.9% = C 60%-69.9% = D

<60% = E