



Wayne County Community College District

COURSE SYLLABUS

WLT 201 SPECIALIZED WELDING PROCESSES

CREDIT HOURS: 3.00

CONTACT HOURS: 45.00

COURSE DESCRIPTION:

This introductory course in various weld processes covers theory and practice, as well as proper procedures for various welding processes. Topics include sweat soldering, silver soldering, brazing, plastic, PVC and spot welding.

PREREQUISITES: *WLT 101*

EXPECTED COMPETENCIES:

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

- Sweat solder using map gas $\frac{3}{4}$ inch copper tube to copper plate and tube fittings/sleeves $\frac{3}{4}$ inch round
- Understand the weld process for welding Thermoplastics and thermosetting polymers
- Run stringer beads on plastic
- Understand the concepts of welding PVC
- Weld outside corner and tee on plastic
- Weld PVC fittings using two and six inch PVC pipe
- Spot weld various thicknesses of metal/galvanized to the pull testing standards of the auto industry with 85% accuracy
- Solder wire frames using soldering iron, solder and solder flux
- Properly use a soldering iron to fabricate a wire frame model
- Braze butt and lap joints with 90% accuracy
- Braze all basic joints with 90% accuracy
- Properly braze cast iron

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