# JAMESTOWN COMMUNITY COLLEGE

**State University of New York** 

## INSTITUTIONAL COURSE SYLLABUS

Course Title: Safety and Cutting Processes

Course Abbreviation and Number: WLD 1200 Credit Hours: 3 Course Type: Lecture/Lab

**Course Description:** This course introduces oxy-fuel and plasma-arc cutting systems. Topics include an intensive introduction to welding safety, proper equipment setup, and operation of oxy-fuel and plasma-arc cutting equipment with emphasis on straight line, curve and bevel cutting. Upon completion, students should be able to oxy-fuel and plasma-arc cut metals of varying thicknesses as well as have an appropriate understanding of welding safety.

#### No requisites.

### **Student Learning Outcomes:**

Students who demonstrate understanding can:

- 1. List the important safety measures for the equipment used during this course.
- 2. List specific machines as well as the type of cutting operations each machine is best suited for.
- 3. Perform acceptable cutting operations using Oxy-Fuel and Plasma cutting systems.
- 4. Perform a basic measuring check on a production part.

#### **Topics Covered:**

- Safety in welding
  - o Burns
  - o Face, eye, and ear protection
  - Ventilation
  - o MSDS
  - o Clothing specifications
  - Cylinders
  - o Fire protections
  - o Equipment maintenance
  - o Electrical safety

- Material handling
- Cutting processes
  - Iron Worker
  - Shear
  - Oxy fuel
  - o Plasma
  - Semi-automatic Oxy fuel
  - o Carbon arc gouging
  - o Haas CNC introduction
  - Manual mills & lathes

#### **Information for Students**

- Expectations of Students
  - <u>Civility Statement</u>
  - Student Responsibility Statement
  - Academic Integrity Statement
- Accessibility Services

Students who require accommodations to complete the requirements and expectations of this course because of a disability must make their accommodation requests to the Accessibility Services Coordinator.

- Get Help: JCC & Community Resources
- Emergency Closing Procedures
- Course grade is determined by the instructor based on a combination of factors, including but not limited to, homework, quizzes, exams, projects, and participation. Final course grade can be translated into a grade point value according to the following:

A=4.0	B+=3.5	B=3	C+=2.5	C=2	D+=1.5	D=1	F=0
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• Veterans and active duty military personnel with special circumstances (e.g., upcoming deployments, drill requirements, VA appointments) are welcome and encouraged to communicate these to the instructor.

Effective Date: Fall 2021