LABETTE COMMUNITY COLLEGE BRIEF SYLLABUS

SPECIAL NOTE:
This brief syllabus is not intended to be a legal contract. A full syllabus will be distributed to students at the first class session.

TEXT AND SUPPLEMENTARY MATERIALS USED IN THE COURSE (if any):

Please check with the LCC bookstore, http://www.labette.edu/bookstore, for the required texts for this class.

COURSE NUMBER: WELD 180

COURSE TITLE: Welding Blueprint Reading

SEMESTER CREDIT HOURS: 3

DEPARTMENT: Welding

DIVISION: Career Technical Education

PREREQUISITES: SMAW, GMAW, and GTAW courses

REVISION DATE: 8/25/17

COURSE DESCRIPTION:
This course is a study of industrial production and fabrication of piping formations and processes. Emphasis is placed on terminology, symbols, and industry standard welding processes. Students will demonstrate the ability to interpret plans and drawings used in industry and the application of fabrication and layout skills.

COURSE OUTCOMES AND COMPETENCIES:
Students who successfully complete this course will be able to:

1. The student will be able to Identify basic lines, views and abbreviations used in blueprints

- Identify types of lines associated with industrial blueprints
- Identify the views associated with an orthographic projection
- Identify the placement of the views of an orthographic projection on a 2D surface
- Utilize abbreviations where appropriate

2. The student will be able to Interpret basic 3D sketches using orthographic projection and blueprints

- Describe each view of an orthographic projection
- Explain the part based on the view
- Accurately lay out the part based on the sketches tolerances

3. The student will be able to Solve applicable mathematical equations

- Demonstrate use of fractions and decimals
- Compute areas
- Compute volumes
- Use basic geometric equations

4. The student will be able to Use basic measuring tools

- Use a variety of measuring tools and layout devices appropriate to the task
- Can read a tape measure to a minimum of 1/16th of an inch or 1mm

5. The student will be able to Interpret scale ratios on a blueprint

- Apply appropriate mathematical principles to assigned tasks

6. The student will be able to Identify basic welding joints and structural shapes

- Identify welding joints
- Identify structural shapes

7. The student will be able to Interpret a bill of materials

- Identify the material description
- Identify the quantities of materials
- Identify parts and item numbers

8. The student will be able to Identify standard AWS weld symbols

- Identify a joint design
- Identify a weld process
- Identify other symbols' components