

SYLLABUS

PFPB 2307  
PIPE FABRICATION AND INSTALLATION I

INDUSTRIAL COMMERCIAL PIPEFITTING

BRAZOSPORT COLLEGE  
LAKE JACKSON TEXAS

PREPARED BY: \_\_\_\_\_ DATE: August 18, 2010  
INSTRUCTOR

RECOMMENDED BY: \_\_\_\_\_ DATE: \_\_\_\_\_  
DIVISION CHAIRMAN

APPROVED: \_\_\_\_\_ DATE: \_\_\_\_\_  
DEAN

The Brazosport College District shall not discriminate against, or exclude from participation in any benefits or activities either on the staff or in the student body, any person on the grounds of sex, race, color, religion, national origin, age or handicap.

BRAZOSPORT COLLEGE  
500 COLLEGE DRIVE  
LAKE JACKSON, TEXAS 77515

## PFPB 2307

### PIPE FABRICATION AND INSTALLATION I

#### COURSE DESCRIPTION

Pipe fabrication procedures of threaded, socketweld, and buttweld pipe joints. Includes pipe and tube bending with hand benders, saddling in and saddling on pipe branches to pipe headers, and fabrication and installation of pipe supports. ( 3C/ 2 lect, 2 lab )

#### COURSE LEARNING OUTCOMES

Fabricate various types of pipe components; install various types of pipe components; fit and align various types of pipe connections; and apply procedures for bending pipe and tubing to specific dimensions.

#### TEXT AND REFERENCES

##### WHEELS OF LEARNING FOR PIPEFITTERS,

modules 08206-06, 08207-06, 08209-06, 08306-07, by Associated Builders and Contractors, Inc. National

THE PIPEFITTERS' BLUE BOOK, by, W. V. Graves, published by Goves Publishers, LaPorte, Texas

**COURSE GOALS** The following list of course goals will be addressed in the course. These goals are directly related to the performance objectives (Addendum A).

1. Demonstate the ability in proper handling and storage of pipe and piping materials.
2. calculate pipe circumferences
3. solve right triangles
4. follow correct safety procedures in accordance with local and OSHA standards
5. take field measurements
6. install threaded pipe

7. cut and bevel pipe, using the oxygen-acetylene burning rig
8. fit and align carbon steel welded pipe
9. make a cut sheet for an isometric drawing
10. complete a bill of materials for a pipe line
11. fabricate from an isometric drawing
12. install fabricated pipe from an isometric drawing

## STUDENT CONTRIBUTIONS

Each student will spend at least 2 hours per week preparing for class. Attendance is critical in this class and is part of the student's final grade. Punctuality and consistency of work attendance is also part of student's grade. The student will have an opportunity to evaluate the instructor.

## COURSE EVALUATION

Grades of A through F will be assigned as per college policy.

Grades as assigned in this course are based on the following grade structure.

Major Exams	80%
Final	20%

## COURSE SCHEDULE

The class meets for 2 hours lecture per week

The class meets for 2 hours lab per week

ADDENDUM A  
PERFORMANCE OBJECTIVES

1. The student will fabricate a pipe line from an isometric drawing using socket weld pipe fittings.
2. The student will fabricate a pipe line fittings from an isometric drawing using butt weld pipe fittings.
3. The student will bend tubing using hand benders to 1/16" accuracy.
4. The student will determine the materials necessary to fabricate pipe from a set of piping prints complying with piping specifications.
5. The student will layout and cut gaskets for a pipe flange.