

# **SYLLABUS**

## **PFPB 1305**

### **BASIC BLUEPRINT READING FOR PIPEFITTER**

INDUSTRIAL COMMERCIAL PIPEFITTING

BRAZOSPORT COLLEGE

LAKE JACKSON, TEXAS

PREPARED BY: \_\_\_\_\_ DATE: January 6, 2015  
INSTRUCTOR

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

RECOMMENDED BY: \_\_\_\_\_ 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 Dr.  
Lake Jackson, Texas 77566

## BASIC BLUEPRINT READING FOR PIPEFITTER

### COURSE DESCRIPTION

**PFPB 1305 CIP** 4605020008

Reading and interpreting working drawings. Includes symbols and abbreviations and the use of sketching techniques to create isometric and multiview drawings of piping and piping components. NCCER credit available. **Credit Hours:** 3 (2 lecture, 2 lab)  
Prerequisite: None

### COURSE LEARNING OUTCOMES:

Use blueprint vocabulary and symbols; interpret piping drawings; and demonstrate basic sketching techniques for isometric and orthographic drawings of piping components.

### TEXT AND REFERENCES

CONTREN LEARNING SERIES, module 08201-06; 08202-06; 08203-06; 08204-06; 08206-06; by National Center For Construction Education And Research, published by Pearson Education, Inc., Upper Saddle River, NJ  
ISBN 0-13-613596-X

THE PIPEFITTER'S BLUE BOOK by, W. V. Graves, published by Groves Publishers, LaPorte, Texas ISBN 0-9708321-2-5

### TEXTBOOK OR COURSE MATERIAL INFORMATION

Required course materials are available at the Brazosport College bookstore, on campus or online at <http://www.brazosport.edu/bookstore>. A student of this institution is not under any obligation to purchase a textbook from the college bookstore. The same textbook is/may also be available from an independent retailer, including an online retailer.

## **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). (\* designates a CRUCIAL goal) The student will:

1. Define object, hidden, extension/dimension, and center lines
2. Define match, section, and projection lines
3. Define piping abbreviations
4. Define pipefitting, valve, flange, and reducer symbols
5. Define butt weld, screwed, and socket weld symbols
6. Define plan, elevation, and section views
7. Use basic drafting tools
8. Draw object, hidden, extension/dimension, and center lines
9. Draw match, section, and projection lines
10. Draw butt weld, screwed, and socket weld symbols
11. Define orthographic views
12. Use architect scale
13. Draw orthographic views
14. Determine piping and equipment elevations
15. Interpret elevation, origin, termination, and direction of pipe runs
16. Dimension vertical and horizontal pipe runs
17. Define plant North
18. Define isometric drawing
19. Interpret isometric drawing
20. Draw isometric drawing

## **STUDENT CONTRIBUTIONS**

Each student will spend at least 2 hours per week preparing for class. Attendance is critical in this class. A student missing 2 classes is subject to withdrawal by the instructor. The student will be given an opportunity to evaluate the instructor/course.

## **STUDENTS WITH DISABILITIES**

Brazosport College is committed to providing equal education opportunities to every student. Brazosport College offers services for individuals with special needs and capabilities including counseling, tutoring, equipment, and software to assist students with special needs. Please contact the Special Populations Counselor, 979.230.3236, for further information.

## **ACADEMIC HONESTY**

Brazosport College assumes that students eligible to perform on the college level are familiar with the ordinary rules governing proper conduct including academic honesty. The principle of academic honesty is that all work presented by you is yours alone. Academic dishonesty including, but not limited to, cheating, plagiarism, and collusion shall be treated appropriately. Please refer to the Brazosport College Student Guide for more information. This is available online at <http://www.brazosport.edu>. Click on the CATALOGS AND SCHEDULES link under STUDENTS.

Academic dishonesty violates both the policies of this course and the Student Code of Conduct. In this class, any occurrence of academic dishonesty will be referred to the Dean of Student Services for prompt adjudication, and will, at a minimum, result in a grade of 0 for the test or assignment, in this course. Sanctions may be imposed beyond your grade in this course by the Dean of Student Services.

## **COURSE EVALUATION**

Your performance objectives and exams will be translated to points and the points to grades. There are 100 points possible and grades will be earned as follows: A=100 to 90, B=89 to 80, C=79 to 70, D=69 to 60.

## **COURSE SCHEDULE**

The class meets for 2 lecture hours

The class meets for 2 lab hours per week.

## **OTHER STUDENT SERVICES INFORMATION**

Information about the Brazosport College Library is available at [www.brazosport.edu/sites/CurrentStudents/Library/default.aspx](http://www.brazosport.edu/sites/CurrentStudents/Library/default.aspx) or by calling (979) 230-3310.

Information about study skills and tutoring for math, reading, writing, biology, chemistry, and other subjects is available in Learning Services. See [www.brazosport.edu/sites/CurrentStudents/LAC/default.aspx](http://www.brazosport.edu/sites/CurrentStudents/LAC/default.aspx) or call (979) 230-3253..

Student Services provide assistance in the following:

Counseling and Advising	(979) 230-3040
Financial Aid	(979) 230-3294
Student Activities	(979) 230-3355

To reach the Information Technology Department for computer, Email, or other technical assistance call the Helpdesk at (979) 230-3266.

**ADDENDUM A**  
**PERFORMANCE OBJECTIVES**

1. The student will define a list of common piping abbreviations used on piping prints by successfully completing a written exam.
2. The student will define and draw the family of lines used on piping prints by successfully completing a written exam.
3. The student will define and draw pipe fittings used on pipe prints by successfully completing a written exam.
4. The student will define valve symbols used on pipe prints by successfully completing a written exam.
5. The student will sketch orthographic views of pipe from an isometric drawing.
6. The student will sketch isometric drawings from orthographic drawings.
7. The student will prepare a material takeoff from isometric pipe drawings.
8. The student will draw and dimension orthographic views of piping. with the use of mechanical drafting equipment.
9. The student will draw and dimension isometric drawings of piping with the use of mechanical drafting equipment.