

SYLLABUS

PFPB 2310 INTERMEDIATE BLUEPRINT READING FOR PIPEFITTERS

INDUSTRIAL COMMERCIAL PIPEFITTING

BRAZOSPORT COLLEGE

LAKE JACKSON TEXAS

PREPARED BY: _____ DATE: September, 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 DRIVE
LAKE JACKSON, TEXAS 77566

Intermediate Blueprint Reading for Pipefitters

COURSE DESCRIPTION

PFPB 2310 CIP 4605020008

Reading and interpreting advanced working drawings to calculate piping runs. Includes instrumentation symbols and abbreviations and the use of advanced sketching techniques to create isometric and orthographic drawings of piping and piping components. NCCER credit available. **Credit Hours:** 3 (3 lecture, 0 Lab)

Prerequisite: PFPB 1305 .

COURSE LEARNING OUTCOMES

Use advanced blueprint vocabulary and symbols; calculate piping runs; interpret advanced pipe drawings; and demonstrate advanced sketching techniques for isometric and orthographic drawings of piping components.

TEXT AND REFERENCES

CONTREN LEARNING SERIES, module 08204-06, ISBN-10: 0-13-613599-4; 08401-07, ISBN-10: 0-13-604786-6 by National Center For Construction Education And Research, published by Pearson Education, Inc., Upper Saddle River, NJ

THE PIPEFITTER'S BLUEBOOK by W.V. Graves, published by Graves Publishing Company, Webster, 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)

1. Interpret alphabet of lines
2. Interpret pipe symbols
3. Interpret column line
4. Draw alphabet of lines
5. Draw pipe symbols
6. Draw piping orthographic
7. Interpret orthographic form
8. Interpret pipeline designation symbol
9. Interpret pipe hanger symbol
10. Interpret pipe revisions
11. Interpret orthographic pipe ellipse symbol
12. Interpret orifice flange symbol
13. Interpret blueprint coordinate lines
14. Define control dimension
15. Describe detail dimension
16. Interpret piping Tie-ins
17. Define pipe meter-run
18. Describe control station
19. Solve right angle triangles
20. Calculate pipe offset travel
21. Calculate piping offset angle
22. Calculate pipe offset run
23. Calculate pipe offset rise
24. Draw pipeline isometric drawing
25. Draw pipe isometric dimensions
26. Draw rolling offset
27. Draw vertical offset
28. Draw lateral offset
29. Determine piping specification tables
30. Interpret piping material specifications
31. Prepare material take-off

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

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 and 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 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 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 the components that make up pipe prints.
2. The student will read orthographic and isometric pipe drawings and interpret information with emphasis on vertical, horizontal, and rolling off sets.
3. The student will draw to scale and dimension orthographic views of piping with emphasis on the ellipse symbol showing vertical, horizontal, and rolling offsets.
4. The student will draw and dimension isometric views of piping with emphasis on vertical, horizontal, and rolling offsets.
5. The student will perform math operations of solving piping offsets for unknown sides and angles.
6. The student will demonstrate an understanding of piping specification tables and interpret specification tables from pipeline numbers.