SYLLABUS

PFPB 2349

FIELD MEASURING, SKETCHING AND LAYOUT

INDUSTRIAL COMMERCIAL PIPEFITTING

BRAZOSPORT COLLEGE

LAKE JACKSON, TEXAS

PREPARED BY: _____DATE: January 6, 2015
INSTRUCTOR

RECOMMENDED BY: _____DATE: _____
DIVISION CHAIRMAN

APPROVED 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.

BRAZOSPRT COLLEGE
500 COLLEGE DR.
LAKE JACKSON, TEXAS 77566

FIELD MEASURING, SKETCHING & LAYOUT

COURSE DESCRIPTION

***PFPB* 2349 CIP** 4605020008
Use, care, and setup of transit and level. Includes field dimensioning, sketching, and layout of future process piping. Emphasizes advanced trade math including the use of trigonometric functions and tables. NCCER credit available. **Credit Hours:** 3 (2 lecture, 2 lab)

COURSE LEARNING OUTCOMES:

Calculate fitting take-off; sketch field run piping according to piping specifications; and set up and use transit and level.

TEXT AND REFERENCES

CONTREN LEARNING SERIES, module 08304-07, ISBN-10: 0-13-614630-9; 08307-07, ISBN-10: 0-13-614633-3 by National Center For Construction Education And Research, published by Pearson Education, Inc., Upper Saddle River, NJ
PIPEFITTERS BLUE BOOK, 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) The student will:

1. demonstrate the use of various measuring devices.
2. solve for unknown angles and unknown sides of right angle triangles
3. Use unit conversion tables.
4. Use tables of equivalents
5. solve arch lengths for various degrees and radius
6. use a transit level for taking elevations of piping and equipment
7. layout a pipe spool for cut lengths and bill of materials
8. layout a trim fitting from a 90 degree fitting of various nominal sizes
9. use plant North for locating piping and equipment
10. Demonstrate knowledge of jargon and nomenclature used in field measuring.
11. Perform screw pipe, butt weld, and socket weld pipe assembly
12. Plan daily work activities

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

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.

Labs	40%
Major Exams	40%
Final	20%

COURSE SCHEDULE

The class meets for 2 hours lecture per week
The class meets for 2 hours lab 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 sketch, dimension, and layout for pipe fabrication various piping problems from given tie-points.

2. The student will demonstrate the proper use and care of a transit level by setup and use as the instructor observes.

3. The student will read a level rod given in decimal of a foot to .005 of one-foot accuracy.

4. The student will demonstrate a working knowledge of math by solving unknown sides and unknown angles of right angle triangles applied to horizontal, vertical, and rolling offset with emphasis on using 45-degree fittings.