BUTTE COLLEGE
COURSE OUTLINE

I. **CATALOG DESCRIPTION**

DFT 4 - Print Reading for Construction and Architecture **3 Unit(s)**

Prerequisite(s): NONE
Recommended Prep: Reading Level IV; English Level III; Math Level III
Transfer Status: CSU
51 hours Lecture

In this course, students will learn to read and understand drawings and specifications used in construction and architectural applications. Topics include line types, views, dimensions, symbols, sketching, materials, specifications, and estimating. Construction prints, drawings and specifications including residential and non-residential applications are used by students in this course.

II. **OBJECTIVES**

Upon successful completion of this course, the student will be able to:

A. Interpret and describe the technical information provided on construction drawings.
B. Apply the "alphabet of lines" to interpret meaning in construction prints and sketches.
C. Apply sketching and lettering skills to communicate meaning in construction and architecture.
D. Differentiate information contained in plans, elevations, sections and details.
E. Read construction specifications and describe materials, methods of construction, project details, legal and code requirements contained therein.
F. Prepare an estimate of material quantities and costs from an assigned construction print and specification set.

III. **COURSE CONTENT**

A. **Unit Titles/Suggested Time Schedule**

Lecture

Topics	Hours
1. Construction Drawing Organization	3.00
2. Construction Math Applications and Measurement	3.00
3. Line Types, Symbols, Views, Dimensioning	3.00
4. Orthographic and Pictorial Views and Sketching Applications	6.00
5. Construction Materials, Specifications and Standards	6.00
6. Plot Plans, Foundation and Floor Plans	6.00
7. Framing Plans, Details and Sections	6.00
8. Heating, Ventilation and Air Conditioning (HVAC) Plans	4.00
9. Plumbing and Electrical Plans	4.00
10. Estimating Construction Material Quantity and Cost	4.00
11. Plan Set Advanced Project	6.00
Total Hours	51.00

IV. **METHODS OF INSTRUCTION**

A. Lecture
B. Collaborative Group Work
C. Class Activities

D. Homework: Students are required to complete two hours of outside-of-class homework for each hour of lecture
E. Reading Assignments

V. **METHODS OF EVALUATION**
A. Exams/Tests
B. Quizzes
C. Projects
D. Homework
E. Class participation
F. Written Assignments

VI. **EXAMPLES OF ASSIGNMENTS**
A. Reading Assignments
1. Please read Unit 9: Construction Specifications and be prepared to discuss in groups assigned by the instructor.
2. Please read Unit 6: Pictorial Views and Sketches starting on page 59 of the textbook. Be prepared to discuss at the next scheduled class.
B. Writing Assignments
1. Please complete Activity 9-1 on page 121 of the textbook and submit to instructor when complete.
2. Please complete Unit 6 Test Your Knowledge questions on page 78 of the text and submit to the instructor.
C. Out-of-Class Assignments
1. As a warm-up to Unit 2: Construction Math and outside of class, please complete the math review in on pages 32 through 39 (all problems in the shaded boxes). Be prepared to review in the next scheduled class.
2. Outside of class, please research the use of plastic (polybutylene) pipe in home construction. Answer the following: What were the essential elements of the case and how many homes were affected. Why is polybutylene pipe a problem in construction? Submit directly to the instructor.

VII. **RECOMMENDED MATERIALS OF INSTRUCTION**
Textbooks:
A. Brown W.C. and Dorfmueller D.P.. Print Reading for Construction. 6th Edition. Goodheart-Willcox Company, Inc., 2012.

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