

SAN DIEGO COMMUNITY COLLEGE DISTRICT
CONTINUING EDUCATION
COURSE OUTLINE

SECTION I

SUBJECT AREA AND COURSE NUMBER

CNCT 632

COURSE TITLE

CONSTRUCTION BLUEPRINT READ II

TYPE COURSE

NON-FEE

APPRENTICESHIP

CATALOG COURSE DESCRIPTION

Course provides apprentices with advanced reading of construction blueprints and specifications for commercial and industrial construction. The student will also learn to analyze measurements, blueprint symbology and building material specifications relating to construction. (FT)

LECTURE/LABORATORY HOURS

56

ADVISORY

Registered as an apprentice in a state-approved apprenticeship program.

RECOMMENDED SKILL LEVEL

NONE

INSTITUTIONAL STUDENT LEARNING OUTCOMES

1. Social Responsibility
SDCE students demonstrate interpersonal skills by learning and working cooperatively in a diverse environment.
2. Effective Communication
SDCE students demonstrate effective communication skills.

INSTITUTIONAL STUDENT LEARNING OUTCOMES (CONTINUED)

3. Critical Thinking
SDCE students critically process information, make decisions, and solve problems independently or cooperatively.
4. Personal and Professional Development
SDCE students pursue short term and life-long learning goals, mastering necessary skills and using resource management and self-advocacy skills to cope with changing situations in their lives.

COURSE GOALS

1. Mastery of facts and basic principles of the discipline.
2. Broad general theory in the discipline.
3. Knowledge skills: The ability to relate general or specialized knowledge relevant to a problem and to implement a solution; the ability to locate, retain and apply relevant knowledge.
4. Performance skills: Development of the practical and technical performance competencies related to advanced blueprint reading.

COURSE OBJECTIVES

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

1. Analyze different types of projects and determine correct applications through interpretation of blueprints to specifications.
2. Demonstrate knowledge of construction materials and estimating process as applied to a job.
3. Demonstrate trade mathematics related to the full range of applied settings in blueprints and estimating materials.

SECTION II

COURSE CONTENT AND SCOPE

1. Orientation
 - 1.1. Overview of course
 - 1.2. Review of course objectives
 - 1.3. Explanation of knowledge and performance standards and tests
2. Advanced Blueprint Reading
 - 2.1. Set of plans
 - 2.2. Advanced plan reading
 - 2.3. Estimating materials
 - 2.4. Handicapped standards
 - 2.5. Modular construction
 - 2.6. Building codes

COURSE CONTENT AND SCOPE (CONTINUED)

- 2.7. Materials of construction
- 2.8. Mathematics for blueprints and estimating
3. Appropriate Reading and Writing Assignments
4. Field Trips and Other Outside Assignments
5. Appropriate Assignments that Demonstrate Critical Thinking and Knowledge and Performance Standards

APPROPRIATE READINGS

Appropriate readings may include, but are not limited to, periodicals, safety manuals, Material Safety Data Sheets (MSDS), OSHA materials and other publications related to construction blueprint reading.

WRITING ASSIGNMENTS

Appropriate writing assignments may include, but are not limited to, short essays as assigned, identifying and listing safety standards, preparing written descriptions of on-the-job activities, performing arithmetic calculations as assigned and providing written answers to specific questions related to construction blueprint reading.

OUTSIDE ASSIGNMENTS

Outside assignments may include, but are not limited to, reading texts, reference resources or handouts, research as needed to complete projects, and organizing and preparing written answers to assigned questions.

APPROPRIATE ASSIGNMENTS THAT DEMONSTRATE CRITICAL THINKING

Assignments which demonstrate critical thinking may include, but are not limited to, written and oral analysis and evaluation of readings and/or classroom material, discussion of safety issues, demonstrating blueprint reading, correct application of equipment, and prioritization of work processes.

EVALUATION

Written quizzes, midterm, final exam, project exams, class participation, attendance and on-going assessment of performance for individual projects.

METHODS OF INSTRUCTION

Lectures, laboratory, demonstrations, guest speakers, student projects, audio-visual presentations, workbook assignments and field trips.

This course, or sections of this course, may be offered through distance education.

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TEXTS AND SUPPLIES

Texts:

Building Trades Blueprint Reading - Part II, Elmer W. Sundberg, American Technical Publishers
Practical Mathematics, Glen M. Hobbs, American Technical Publishers

Blueprints:

Supplied by Instructor, including miscellaneous handouts.

Supplies:

As required by projects.

Tools:

Carpentry hand tools required by employers.

TEXTS AND SUPPLIES (CONTINUED)

References and Materials:

Appropriate course specific workbooks from the Associated General Contractors of America.

REVISED BY: Instructional Services, SLOs added DATE: March 8, 2017

ASSOCIATED GENERAL CONTRACTORS

PREPARED BY: JOINT APPRENTICESHIP COMMITTEE DATE: 3/27/95

REVISED BY: Randy Barnes DATE: November, 2006

REVISED BY: Instructional Services, SLOs added DATE: March 8, 2017

REVISED BY: Martin Anderson DATE: May 6, 2020

Instructors must meet all requirements stated in Policy 3100 (Student Rights, Responsibilities and Administrative Due Process), and the Attendance Policy set forth in the Continuing Education Catalog.

REFERENCES:

San Diego Community College District Policy 3100
California Community Colleges, Title 5, Section 55002
Continuing Education Catalog