

I. COURSE DESCRIPTION:

- A. Department Information:
Division: Technical
Department: Welding
Course ID: INSPEC 026B
Course Title: Non-structural Plan Review
Units: 3
Lecture: 3 Hours
Laboratory: None
Prerequisite/Corequisite: INSPEC 013B
- B. Catalog and Schedule Description:
Training in the application of the Uniform Building Code to pre-construction drawings, including legal requirements for non-structural plan review, local and community laws applicable to pre-construction drawings, and the use of plan reviews as a first step in performing consistent and thorough inspections.

II. NUMBER OF TIMES COURSE MAY BE TAKEN FOR CREDIT: One

III. EXPECTED OUTCOMES FOR STUDENTS:

Upon successful completion of the course, students should be able to:

- A. Explain the construction plan requirements of the Uniform Building Code.
B. Compare design elements with the requirements of the Uniform Building Code.
C. Identify plan components.
D. Demonstrate the ability to visualize proposed structures delineated in construction drawings.
E. Develop correction notices for non-complying building elements.

IV. COURSE CONTENT:

- A. Working drawings
1. Floor plans
2. Elevation drawings
3. Sectional drawings
4. Plot plan
- B. Detail drawings
1. Symbols
2. Standardized
3. Electrical
4. Plumbing
5. Mechanical
6. Abbreviations
- C. Sections
D. Scales
1. Architectural
2. Engineers
- E. Construction methods
1. Relationship of one room to another
2. Circulation pattern
3. Door swing
- F. Legal specifications
1. Local ordinances
2. State regulations
- G. Plan review scheme
1. Name address of permittee, architect, or engineer
2. Land use requirements

3. Public improvements
 - a) Curbs
 - b) Sidewalks
 - c) Streets
 4. Private improvements
 - a) Access
 - b) Driveways
 5. Occupancy classification
 6. Type of construction
 7. Location on property
 8. Allowable area
 9. Allowable height
 10. Occupant load
- H. Detailed requirements
1. Sanitation
 2. Roof covering
 3. Glazing
 4. Wall finish
 5. Fire-resistive construction
 6. Veneer
 7. Fire-extinguishing equipment
 8. Exiting
 9. Disabled access
 10. Energy conservation

V. METHODS OF INSTRUCTION:

- A. Directed discovery discussions, lectures, and video viewing
- B. Instructor/student conferences to discuss specific construction problems
- C. Students will view videos of active construction sites and write correction notices for code deficiencies.

VI. TYPICAL ASSIGNMENTS:

- A. Read Chapter on Blueprint Reading and define six different roof types.
- B. Using public facilities cite the requirements for curb and gutter in a residential area.
- C. Read and familiarize yourself with the plans for Wendy Restaurant.
- D. Read Uniform Building Code Chapter on Occupancy Classifications and assign occupancy groups to a Pizza Hut, Bank of America, and a high school.

VII. EVALUATION(S):

- A. Methods of Evaluation:
 1. Graded assignments - Each chapter exercise must be completed and a satisfactory grade received to advance to the next exercise.
 2. Mid-term examination
 3. Final examinationTypical Questions:
 - a) Determine the occupancy group, maximum allowable area, and the exiting requirements for 1000 square foot building proposed to house kindergarten students.
 - b) Explain the purpose of installing metal shields on a foundation.
4. Feedback based on conferences with the instructor
- B. Frequency of Evaluation:
 1. Exercises graded weekly
 2. One mid-term examination
 3. One final examination
 4. Periodic feedback based on conferences with the instructor

San Bernardino Valley College
Curriculum Approved: September 29, 2003
Last Updated: September 2003

VIII. TYPICAL TEXT(S):

Proctor, Thomas, Building Trades Blueprint Reading, Part 2, America Technical Society, Chicago, Illinois 2000

Plan Review Manual, International Conference of Building Officials, Whittier, California, 2000

Uniform Building Code, International Conference of Building Officials, Whittier, California, 2000

IX. OTHER SUPPLIES REQUIRED OF STUDENTS:

Three-ring binder