ID A250: CODES AND BUILDING SYSTEMS

Item	Value
Curriculum Committee Approval Date	12/11/2013
Top Code	130200 - Interior Design and Merchandising
Units	3 Total Units
Hours	54 Total Hours (Lecture Hours 54)
Total Outside of Class Hours	0
Course Credit Status	Credit: Degree Applicable (D)
Material Fee	No
Basic Skills	Not Basic Skills (N)
Repeatable	No
Open Entry/Open Exit	No
Grading Policy	Standard Letter (S)

Course Description

This course examines the building code relative to Interior Design and Architecture. Construction materials and building systems including structural, mechanical, electrical, plumbing and lighting are analyzed in conjunction with the code. ADVISORY: ID A215. Transfer Credit: CSU.

Course Level Student Learning Outcome(s)

1. State the purpose of the federal regulatory acts, standards organizations and various codes that affect interior design.
2. Demonstrate an understanding of the application of codes and know how to further research the requirements of occupancy, construction types, and means of egress, fire prevention and accessibility for compliance relative to specific project types.

Course Objectives

- 1. Analyze how professional and product liabilities occur in the Interior Design profession.
- 2. Identify and define the purpose of the federal regulatory acts, standards organizations, and various codes that affect interiors.
- 3. Compare building construction types and their relationship to building sizes.
- 4. Identify occupancy classifications and how to calculate occupant loads.
- 5. List types of egress and how to determine exit locations, arrangements, capacity, and travel distance.
- 6. Explain the types of fire and smoke prevention, detection, and suppression systems.
- 7. Demonstrate knowledge of barrier-free accessibility and ADA requirements.
- 8. Understand the various building systems including electrical, mechanical, plumbing structural and the process of working with specialty consultants and engineers on interior design projects.

Lecture Content

Regulations, Standards, and Codes Federal Regulations Americans with Disabilities Act (ADA) Occupational Safety and Health Act (OSHA) Fair Housing ACT (FHA) Standards Organizations National Fire Protection Agency (NFPA) American National Standards Institute (ANSI) American Society for Testing and Materials (ASTM) American Society of Heating, Refrigeration, and Air Conditioning Engineers (ASHRAE) Underwriters Laboratories (UL) Model Building, Plumbing Mechanical Codes International Building Code California Building Code Local Codes Occupancy classifications and loads Construction types and building sizes Building Systems: Structural Mechancial Plumbing Electrical/ Lighting Means of Egress Type of egress Exit location, arrangement, capacity and travel distance Exit lighting Signage Smoke and Fire Protection Prevention Detection Suppression Universal Design General Requirements for accessibility (ADA) Signage and communication Horizontal circulation Vertical access Public telephones and drinking fountains Toilet facilities Public space access Open office criteria Site Accessibility/Parking Coordination of Drawings, Schedules, and Specifications Interiors: Performance Criteria, Health Safety Factors and Code Compliance Flooring hard surfaces soft surfaces Wall finishes Window treatments Upholstered furniture Casegoods furniture Open office systems

Method(s) of Instruction

- Lecture (02)
- DE Online Lecture (02X)

Instructional Techniques

Lecture, demonstration, laboratory, critique (instructor/student), multi-media, research, and student presentation.

Reading Assignments

.

Writing Assignments

Students will work with a non-compliant floor plan and prepare weekly assignments to correct the plan based on the outline topics. Students will research one aspect of ADA/Accessibility compliance and document the research with graphics, photographs and a written analysis to present to the class. Students will evaluate the project to determine consultant s scope of work including Architectural, Structural, Electrical, and Mechanical Plumbing. Students will evaluate the project to determine appropriate finish materials and products and prepare a materials board with specification information. Students will visit local building department to research requirements for the plan check submittal and approval processes.

Out-of-class Assignments

.

Demonstration of Critical Thinking

Student projects, class presentations, research, examinations, student participation and attendance.

Required Writing, Problem Solving, Skills Demonstration

Students will work with a non-compliant floor plan and prepare weekly assignments to correct the plan based on the outline topics. Students will research one aspect of ADA/Accessibility compliance and document the research with graphics, photographs and a written analysis to present to the class. Students will evaluate the project to determine consultant s scope of work including Architectural, Structural, Electrical, and Mechanical Plumbing. Students will evaluate the project to determine appropriate finish materials and products and prepare a materials board with specification information. Students will visit local building

department to research requirements for the plan check submittal and approval processes.

Textbooks Resources

1. Required Ching, Francis D.K. . Building Construction Illustrated, ed. New York: John Wiley Sons, 2008 2. Required Jordan, James E. . California State-Specific Access Codes. A Simplified Approach to Accessibility, ed. Arizona: Jordan Publishing, 2008