



INTERIOR
DESIGNERS
INSTITUTE

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Syllabus

Course

222-Codes

Building Codes for Commercial Buildings

Grading

Notebook:	10 points
3 Quizzes (5 pts each):	15 points
9 Exercises (10 pts each):	90 points
Final exam	80 points
<u>Attendance</u>	<u>5 points</u>
Total:	200 points

Course Reading

HANDOUT (Print from online file for 1st class meeting):
Codes Course Supplement (referred to herein as "Code Supplement") ****more than 60 pages****

EXERCISES (Print from online file for 1st class meeting):
Exercises 1-9 (note: exercise sheets 2b, 3b, 4b, & 8b must be printed to scale on 11x17 paper, do not "scale to fit paper" for these sheets - all other sheets are standard 8.5x11 inches)

BOOK (Purchase for 1st class meeting):
Thornburg, Douglas W.; 2018 International Building Code Illustrated Handbook (referred to herein as "IBC Handbook")
ISBN-13 978-1260132298

Notebook

Please review carefully the rubric at the end of this syllabus for applicable requirements

Supplies

Where the word **TOOLS** appears in the outline, bring the following to class:

Drafting Scale
Calculator
Measuring Tape (12 feet minimum)

Overview

This lecture-based course has been designed to promote an understanding of code-related knowledge and its competent application to real world commercial design situations through visually-rich teaching tools and secondary references that utilize extensive graphics and diagrams. This course strives to emphasize both the *rational basis* of life-safety and barrier-free regulations.

Objectives

1. To provide an understanding of various state and federal life-safety and barrier-free regulations that affect fundamental aspects of commercial interior design;
2. To provide an understanding of primary and secondary references and develop competent skills in accessing the information contained in these resources; and,
3. To promote competent implementation of code-related concepts through weekly hands-on activities that simulate real activities undertaken by practicing professionals.

OUTLINE:

CLASS 1: **Introduction to Codes:**

Lecture:

Why you need this class
Unique terms and language for building codes, construction, and allied disciplines
Code creation
Model code – IBC International building code, CBC California Building Code
Codes and construction vary by geographic location
Code enforcement

Exercise #1: Obtain permit applications and business cards from a local building department

Reading to prepare for quiz A during class 2:

Code Supplement
Exercise 2 supplement
IBC Handbook
Forward
Chapter 1 as required

Chapter 2, 3, 5, & 10 read only pages corresponding to sections included within Course Supplement

CLASS 2: _____ **Occupancy :**

Lecture:

Occupancy Groups
Occupancy Separation / Compartmentalization / Fire Separation
Occupant Load

Quiz A: On reading assigned for this lecture (see last week)

TOOLS

Exercise #2: Given a space plan, identify occupancy classifications, calculate square footages and determine occupant loads.

Reading to prepare for quiz B during class 3:

Code Supplement

Exercise 3 supplement

IBC Handbook

Chapter 10 read only pages corresponding to sections included within Course Supplement

CLASS 3: _____ **Movement: Exiting & Egress, Introduction:**

Lecture:

Design and configuration of various elements
Number of exits
Paths of egress travel

Quiz B: On reading assigned for this lecture (see last week)

TOOLS

Exercise #3: Given a space plan, identify and label various components of the egress system.

Reading for next week:

Code Supplement

Exercise 4 supplement

IBC Handbook

Chapter 10 read only pages corresponding to sections included within Course Supplement

CLASS 4: _____ **Movement: Exiting & Egress, continued:**

Lecture:

Design and configuration of egress system
Rated corridor construction, rated assemblies

TOOLS

Exercise #4: Given a space plan, identify and label various components of the egress system.

Reading to prepare for quiz C during class 5:

Code Supplement

Exercise 5 supplement

CLASS 5: Accessible Route :

Lecture:

Accessibility, Americans with Disabilities Act
Universal design - usability by all
Wayfinding, Signage
Definition of accessible route, and required elements
Clearances
Hazards along the accessible route

Quiz C: On reading assigned for this lecture (see last week)

TOOLS

Exercise #5: Observations on accessibility; submit typewritten answers to questions about the in-class activity.

Reading for next week:

Code Supplement
Exercise 6 supplement

CLASS 6 Movement: Stairs and Ramps :

Lecture:

Design
Configuration
Accessibility requirements

TOOLS

Exercise #6 Small group activity; Given stair and ramp diagrams, provide required code information and data.

Reading for next week:

Code Supplement
Exercise 7 supplement

CLASS 7 Sanitary Facilities :

Lecture:

Single and multiple accommodation toilet rooms

TOOLS

Exercise #7 Small group activity to identify required barrier-free clearance dimensions on single accommodation toilet room plan provided by instructor.

Reading for next week:

Code Supplement
Exercise 8 supplement
IBC Handbook
Chapter 8, & 12 read only pages corresponding to sections included within Course Supplement

CLASS 8: Fire & Flamespread :

Lecture:

Life-safety requirements for interior wall & ceiling finishes
Requirements for products and finish materials

Exercise #8: Given a space plan, select wall and ceiling finishes for various rooms and areas.

Reading for next week:

Code Supplement

Class 9 supplement

IBC Handbook

Chapter 9 Chapter 8, & 12 read only pages corresponding to sections included within Course Supplement

CLASS 9: Fire Suppression & Integrating Codes into Design:

Lecture:

Fire suppression
Alarm systems
Fire sprinklers
Standpipes
Fire hose cabinets
Fire extinguishers
Integrating codes into the design process

Exercise #9 Fire sprinklers

Reading for next week:

Code Supplement

Class 10 supplement

CLASS 10: Existing Buildings (flex day):

Lecture:

Problems associated with changes in occupancy group; occupant load; specific area of alteration; barrier-free path of travel modifications; and unreasonable hardship issues.

CLASS 11: Final Exam Review:

Lecture:

Review of course topics relevant for the final exam.

CLASS 12: FINAL EXAM :

Given a hypothetical commercial floor plan and outline specifications, search for code violations answering multiple choice questions. Open book, and Open notes.

TOOLS

COURSE POLICIES:

Tutoring:

A list of qualified tutors is available upon request. Please see the professor if you feel you need a tutor.

Attendance:

Each student may have two total absences. However, more than two consecutive class meeting absences or three non-consecutive class meeting absences per course may result in the student being withdrawn from that course. Attendance is considered an important habit to acquire in becoming a mature, responsible member of the professional community.

Quizzes and Exams:

There are no make up quizzes or exams. Quizzes and exams can only be taken on the date listed in the syllabus or as modified during the quarter. Quizzes and exams cannot be taken early or late. There are absolutely NO exceptions.

Homework:

Homework is only accepted on the due date listed in the syllabus or as modified during the quarter. No late or early submittal of homework will be accepted. There are absolutely NO exceptions.

Cheating:

Any form of cheating will result in failure of the course.

Extra Credit:

There is no extra credit offered for this course. There are absolutely NO exceptions.