



DEPARTMENT OF FINANCIAL SERVICES

*Division of State Fire Marshal
Bureau of Fire Standards and Training*

Title: Syllabus for Codes and Standards

Date: November 2019

Section I - Course Information

Course Title: Codes and Standards

Course Number(s): BFST, BFST, ATPC1510

Class Days/Time: Florida State Fire College Campus 11655 NW Gainesville Road, Ocala, FL 34482
Bldg. C – Classrooms - Monday-Friday 8 a.m.- 5 p.m. additional work outside of class may be required.

Section II - Points of Contact

Training Supervisor:

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Program Manager/Instructor:

Name:
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Section III – Course Description

The purpose of this course is to familiarize students or current inspectors with the Florida Fire Prevention Code which includes NFPA 101, NFPA 1, FSS 633 and FAC 69A. Students will learn how to research the codes and apply them to inspection activities.

Section IV – Course Material, Grading and Attendance

Recommended Book: *Florida Fire Prevention Code*, (2012) ISBN 978-1-55701-737-6
Used by FSFC – 2017 Florida Statutes Chapter 633 and Florida Administrative Code 69A and Florida Fire Prevention Code, 6th Edition

Prerequisite(s): None

Contact Hours: This class has 45 contact hours.

Continuing Educations Units (CEU's): 45 contact hours towards Fire Safety Inspector 1 and Instructor I, II, III

Pre-Course Assignment: None

Required Materials: Paper, pens, USB portable storage device (thumb drive)

Grading: Students must achieve a minimum cumulative score of 70% to pass this course. Course grades are determined from assignments and activities including, to homework, projects, quizzes, exams, and presentations. Below is the breakdown of the final accumulative grading:

- Individual Exercises 30 points
- Group Exercises 15 points
- Final Group project 15 points
- Final Written Exam 40 points

Attendance: Students are required to attend all sessions of the course.

- Excused absences - Students are permitted excused absences totaling no more than 10% of class (4.5 hours maximum); the instructor shall be the sole determining authority in the determination of an excused absence and may assign supplemental work to make up for missed class time.
- Unexcused absences - The instructor shall be the sole determining authority in the determination of an unexcused absence (i.e. "no call, no show"). The instructor has no obligation to offer the student an opportunity to make up assignments, including quizzes and/or exams, but may do so at his/her discretion.

Section V Instructor Qualifications

As per Chapter Florida Administrative Codes (Rule), *Programs of Study and Vocational Courses*, instructors must meet the following qualifications to be authorized to teach this course:

Rule: 69A-37.065) Instructor Qualifications:

- a. An Instructor I must hold certification as a Firesafety Inspector I.
- b. Instructor II or III may teach provided he or she has successfully completed the course.

Section VI - Job Performance Requirements

Given information from discussion and reading materials, the student will satisfy the Job Performance Requirements (JPR) of the applicable National Fire Protection Association (NFPA) standards.

NFPA 1031, *Standard for Fire Safety Inspector*, 2014 Edition

General. The Fire Inspector I shall meet the job performance requirements defined in Sections 4.2 through 4.4. In addition, the Fire Inspector I shall meet the requirements of Section 4.2 of NFPA 472.

4.2.1 Prepare inspection reports, given agency policy and procedures, and observations from an assigned field inspection, so that the report is clear and concise and reflects the findings of the inspection in accordance with the applicable codes and standards and the policies of the jurisdiction.

(A) Requisite Knowledge. Applicable codes and standards adopted by the jurisdiction and policies of the jurisdiction.

(B) Requisite Skills. The ability to conduct a field inspection, apply codes and standards, and communicate orally and in writing.

4.2.4* Investigate common complaints, given a reported situation or condition, so that complaint information is recorded, the AHJ-approved process is initiated, and the complaint is resolved.

(A) Requisite Knowledge. Applicable codes and standards adopted by the jurisdiction and policies of the jurisdiction.

(B) Requisite Skills. The ability to apply codes and standards, communicate orally and in writing, recognize problems, and resolve complaints.

4.2.5* Identify the applicable code or standard, given a fire protection, fire prevention, or life safety issue, so that the applicable document, edition, and section are referenced.

(A) Requisite Knowledge. Applicable codes and standards adopted by the jurisdiction.

(B) Requisite Skills. The ability to apply codes and standards.

4.3.1 Identify the occupancy classification of a single-use occupancy, given a description of the occupancy and its use, so that the classification is made according to the applicable codes and standards.

(A) Requisite Knowledge. Occupancy classification types; applicable codes, regulations, and standards adopted by the jurisdiction; operational features; and fire hazards presented by various occupancies.

(B) Requisite Skills. The ability to make observations and correct decisions.

4.3.2 Compute the allowable occupant load of a single-use occupancy or portion thereof, given a detailed description of the occupancy, so that the calculated allowable occupant load is established in accordance with applicable codes and standards.

(A) Requisite Knowledge. Occupancy classification; applicable codes, regulations, and standards adopted by the jurisdiction; operational features; fire hazards presented by various occupancies; and occupant load factors.

(B) Requisite Skills. The ability to calculate occupant loads, identify occupancy factors related to various occupancy classifications, use measuring tools, and make field sketches.

4.3.3* Inspect means of egress elements, given observations made during a field inspection of an existing building, so that means of egress elements are maintained in compliance with applicable codes and standards and deficiencies are identified, documented, and reported in accordance with the applicable codes and standards and the policies of the jurisdiction.

(A) Requisite Knowledge. Applicable codes and standards adopted by the jurisdiction related to means of egress elements, maintenance requirements of egress elements, types of construction, occupancy egress requirements, and the relationship of fixed fire protection systems to egress requirements and to approved means of egress elements, including, but not limited to, doors, hardware, and lights.

(B) Requisite Skills. The ability to observe and recognize problems, calculate, make basic decisions related to means of egress, use measuring tools, and make field sketches.

4.3.4* Verify the type of construction for an addition or remodeling project, given field observations or a description of the project and the materials being used, so that the construction type is identified and recorded in accordance with the applicable codes and standards and the policies of the jurisdiction.

(A) Requisite Knowledge. Applicable codes and standards adopted by the jurisdiction, types of construction, rated construction components, and accepted building construction methods and materials.

(B) Requisite Skills. The ability to read plans, make decisions, and apply codes and standards.

4.3.8* Recognize hazardous conditions involving equipment, processes, and operations, given field observations, so that the equipment, processes, or operations are conducted and maintained in accordance with applicable codes and standards and

deficiencies are identified, documented, and reported in accordance with the applicable codes and standards and the policies of the jurisdiction.

(A) Requisite Knowledge. Practices and techniques of code compliance inspections, fire behavior, fire prevention practices, ignition sources, safe housekeeping practices, and classification of hazardous materials.

(B) Requisite Skills. The ability to observe, communicate, apply codes and standards, recognize problems, and make decisions.

4.3.9 Compare an approved plan to an existing fire protection system, given approved plans and field observations, so that any modifications to the system are identified, documented, and reported in accordance with the applicable codes and standards and the policies of the jurisdiction.

(A) Requisite Knowledge. Fire protection symbols and terminology.

(B) Requisite Skills. The ability to read and comprehend plans for fire protection systems, observe, communicate, apply codes and standards, recognize problems, and make decisions.

4.3.10* Verify that emergency planning and preparedness measures are in place and have been practiced, given field observations, copies of emergency plans, and records of exercises, so that plans are prepared and exercises have been performed in accordance with applicable codes and standards and deficiencies are identified, documented, and reported in accordance with the applicable codes and standards and the policies of the jurisdiction.

(A) Requisite Knowledge. Requirements relative to emergency evacuation drills that are required within the jurisdiction, ways to conduct and/or evaluate fire drills in various occupancies, and human behavior during fires and other emergencies.

(B) Requisite Skills. The ability to identify the emergency evacuation requirements contained in the applicable codes and standards and interpret plans and reports.

4.3.11* Inspect emergency access for an existing site, given field observations, so that the required access for emergency responders is maintained and deficiencies are identified, documented, and corrected in accordance with the applicable codes, standards, and policies of the jurisdiction.

(A) Requisite Knowledge. Applicable codes and standards, the policies of the jurisdiction, and emergency access and accessibility requirements.

Requisite Skills. The ability to identify the emergency access requirements contained in the applicable codes and standards, observe, make decisions, and use measuring tools.

4.3.12* Verify code compliance for incidental storage, handling, and use of flammable and combustible liquids and gases, given field observations and inspection guidelines from the AHJ, so that applicable codes and standards are addressed and deficiencies are identified, documented, in accordance with the applicable codes and standards and the policies of the jurisdiction.

(A) **Requisite Knowledge.** Classification, properties, labeling, storage, handling, and use of incidental amounts of flammable and combustible liquids and gases.

(B) **Requisite Skills.** The ability to observe, communicate, apply codes and standards, recognize problems, and make decisions.

4.3.13* Verify code compliance for incidental storage, handling, and use of hazardous materials, given field observations, so that applicable codes and standards for each hazardous material encountered are addressed and deficiencies are identified, documented, and reported in accordance with the applicable codes and standards and the policies of the jurisdiction.

(A) **Requisite Knowledge.** Classification, properties, labeling, transportation, storage, handling, and use of hazardous materials.

(B) **Requisite Skills.** The ability to observe, communicate, apply codes and standards, recognize problems, and make decisions.

4.3.14 Recognize a hazardous fire growth potential in a building or space, given field observations, so that the hazardous conditions are identified, documented, and reported in accordance with the applicable codes and standards and the policies of the jurisdiction.

(A) **Requisite Knowledge.** Basic fire behavior; flame spread and smoke development ratings of contents, interior finishes, building construction elements, decorations, decorative materials, and furnishings; and safe housekeeping practices.

(B) **Requisite Skills.** The ability to observe, communicate, apply codes and standards, recognize hazardous conditions, and make decisions.

4.3.15* Determine code compliance, given the codes, standards, and policies of the jurisdiction and a fire protection issue, so that the applicable codes, standards, and policies are identified and compliance is determined.

(A) **Requisite Knowledge.** Basic fire behavior; flame spread and smoke development ratings of contents, interior finishes, building construction elements, life safety systems, decorations, decorative materials, and furnishings; and safe housekeeping practices.

(B) **Requisite Skills.** The ability to observe, communicate, apply codes and standards, recognize hazardous conditions, and make decisions.

Section VII- Plan of Instruction

The following is the plan of instruction used during course offerings held at the Florida State Fire College. It also serves as the suggested instructional block format for other approved training providers who use the recommended text book. All class offerings **must** satisfy the JPRs listed in *Section VI – Job Performance Requirements* regardless of textbook used.

Day/Date	Chapters	Activities
Day 1	Chapter 1 – Role of the Plans Examiner Chapter 2 – Plans Review Process Chapter 3 – Codes and Standards Chapter 4 – Plan Sets	<ul style="list-style-type: none"> • Paperwork • Introductions • Review of Final Project Presentation
Day 2	Chapter 5 – Site, Plot, Utility, and Landscape Plans Chapter 6 – Architectural Plans Chapter 7 – Structural Plans Chapter 8 – Mechanical Plans	<ul style="list-style-type: none"> • Quiz 1 • Assignment 1 • Work on team project
Day 3	Chapter 9 – Electrical Plans Chapter 10 – Automatic Sprinkler & Standpipe Systems Plans Chapter 11 – Fire Alarm & Detection Systems	<ul style="list-style-type: none"> • Quiz 2 • Assignment 2 • Work on team project
Day 4	Chapter 12 – Automatic Elevators, Fire Command Centers, and Fire Extinguishing and Smoke Control Systems Chapter 13 – Other Plans Reviews Related to Fire Protection Chapter 14 – Alternative Design Methods Chapter 15 – Renovations & Tenant Improvements	<ul style="list-style-type: none"> • Quiz 3 (morning) • Assignment 3 • Work on team projects
Day 5	Final Examination Final Project Presentations	<ul style="list-style-type: none"> • Team Presentations • Final Exam

Section VIII – Final Presentation and Grading Rubric

Description of Assignment:

The final project for this class involves a group presentation in PowerPoint format. All members are expected to contribute equally. The presentation should take no longer than 15 minutes and groups must submit a written summary of their work to accompany their presentation.

Codes and Standards Assignments Due Friday

Assignment #1 (PowerPoint)

- You will write a 3 Page paper on the history of the life safety code and Present on PowerPoint.
- What brought about the life safety code? What years did the life safety code start? What encompasses the life safety code?
- The paper must be typed in 12 point font, 1.5" line spacing, Times New Roman (font type).
- You must cite your work on an independent works cited page. Only the pages that are typed are counted.

Assignment #2 (PowerPoint)

- You will pick a code from NFPA 1 or NFPA 101; this can include 633 or 69a. You will research the code that you picked and be prepared to share that code with the class.
- What is the code?
- Where did you find the code?

Section IX – Revision Dates

Revision Dates:

November 2, 2019
July 27, 2018
October 19, 2016

Author:

Bruce Gillingham
Frank Ennist
Michael Swartz

Rubric for Presentation – Max of 20 points for each Criteria

Criteria	1 – Poor	2 – Below Average	3 – Average	4 – Excellent	Student Total
Presentation Information (Content)	Presentation contains little to no useful material	Presentation had moments where valuable material was presented however as a whole content was lacking	Presentation contains valuable information and was beneficial to both the reader and the audience.	Presentation contains significant valuable information and was extremely beneficial to both the reader and the audience.	
Presentation	Handwritten report, no contact information, poor power point presentation	Typed report, no header, follows required format in parts, power point program acceptable	Typed report, header present, follows required format, valuable information and was beneficial to both the reader and the audience.	Typed report, header present, follows required format, significant valuable information and was extremely beneficial to both the reader and the audience.	
Length	Too short, does not provide sufficient or pertinent information	Too lengthy, readers and audience become distracted	Correct length but does not capture all essential information	Correct length and captures all essential information	
Grammar & Mechanics	Grammatical errors and spelling that detract from the paper and presentation	Very few grammatical errors and spelling that detract from the paper and presentation, resources, generally acceptable with some bias.	Grammatical errors and spelling are rare and do not detract from the paper and presentation, resources well established	Presentation uses visuals effectively and could be distributed as is with no further editing	
Support	Few resources supporting project; sources insignificant or unsubstantiated	Sources generally acceptable but nor research/evidence based	Sources well selected to support the project with credible material	Strong sources to support project, well researched.	

Total Score

Team Members:
