

Florida Department of Education  
CURRICULUM FRAMEWORK

**Program Title:** FIRE INSPECTOR I  
**Program Type:** Job Preparatory  
**Occupational Area:** Public Service Occupations  
**Components:** One Program with One Occupational Completion Point

PSAV

**Program Numbers** P430204  
**CIP Number** 0743.020200  
**Grade Level** 30, 31  
**Standard Length** 200 hours  
**Certification** FIRE FIGHT @7 G  
**CSO** N/A  
**Facility Code** 264  
**Co-op Method** Yes  
**Apprenticeship** Yes  
**Basic Skills**  
     **Math** 10  
     **Language** 10  
     **Reading** 10

- I. **MAJOR CONCEPTS/CONTENT:** The purpose of this program is to prepare students for employment as fire inspectors (SOC 33-2021.01), fire marshals (SOC 33-2021), and fire protection specialists (SOC 33-2021) in paid, volunteer, and combination fire departments and industry.

The program must be approved by the Division of State Fire Marshal, Bureau of Fire Standards and Training. Outcomes and Student Performance Standards in this program have been adapted from the National Fire Protection Association Fire Fighter Professional Qualifications (NFPA 1031) for inspectors, as regulated by the Florida Bureau of Fire Standards and Training through Chapter 633, F.S. and the State Fire Marshal Rules, Chapter 4A-37, Florida Administrative Code (F.A.C.).

The content includes, but is not limited to, an understanding of fire inspection practices, fire protection systems, fire codes and standards, building construction, and plans review.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs is provided through career and technical classroom instruction and applied laboratory procedures or practice. This program focuses on broad, transferable skills and stresses understanding and demonstration of the following elements of the public service industry; planning, management, finance, technical and production skills, underlying principles of technology, labor issues, community issues and health, safety and environmental issues.

- II. **LABORATORY ACTIVITIES:** Laboratory and field activities are an integral part of this program. Out of classroom experiences must

be provided with field trips to view actual installations, and test operations of, a sampling of systems equipment.

**III. SPECIAL NOTES:** Completion of courses in fire behavior is strongly encouraged.

Cooperative training - OJT is appropriate for this program. Whenever cooperative training - OJT is offered, the following are required for each student: a training plan, signed by the student, teacher, and employer, which includes instructional objectives and a list of on-the-job and in-school learning experiences; a workstation that reflects equipment, skills, and tasks that are relevant to the occupation which the student has chosen as a career goal. The student must receive compensation for work performed.

If this program is offered for 450 hours or more, in accordance with Rule 6A-10.040 F.A.C., the minimum basic skills grade level required for this postsecondary adult career and technical program is: Mathematics 10.0, Language 10.0, and Reading 10.0. These grade level numbers correspond to a grade equivalent score obtained on one of the state designated basic skills examinations. If a student does not meet the basic skills level required for completion from the program, remediation should be provided concurrently in Vocational Preparatory Instruction (VPI). Please reference the Rule for exemptions.

This program is offered in postsecondary adult vocational (PSAV) courses. Career and technical credit shall be awarded to the student on a transcript in accordance with Section 1001.44, F.S.

Federal and state legislation requires the provision of accommodations for students with disabilities to meet individual needs and ensure equal access. Adult students with disabilities must self-identify and request such services. Students with disabilities may need accommodations in such areas as instructional methods and materials, assignments and assessments, time demands and schedules, learning environment, assistive technology and special communication systems. Documentation of the accommodations requested and provided should be maintained in a confidential file.

SCANS Competencies: Instructional strategies for this program must include methods that require students to identify, organize, and use resources appropriately; to work with each other cooperatively and productively; to acquire and use information; to understand social, organization, and technological systems; and to work with a variety of tools and equipment. Instructional strategies must also incorporate the methods to improve students' personal qualities and high-order thinking skills.

**IV. INTENDED OUTCOMES:** After successfully completing this program, the student will be able to:

**OCCUPATIONAL COMPLETION POINT - DATA CODE A**

Fire Inspector I - SOC 33-2021

Fire Marshal - SOC 33-2021

Fire Protection Specialist - SOC 33-2021

- 01.0 Demonstrate understanding of the Life Safety Code as applied to various kinds of occupancies.
- 02.0 Demonstrate ability to locate proper citations within the Life Safety Code.
- 03.0 Demonstrate knowledge of the concept of code equivalency.
- 04.0 Demonstrate knowledge of types of egress and distances required.
- 05.0 Demonstrate the ability to properly classify types of occupancies.
- 06.0 Demonstrate the ability to calculate the size, area, and volume of complex building shapes.
- 07.0 Demonstrate ability to use architectural ruler.
- 08.0 Demonstrate recognition of various types and methods of construction as denoted in architectural drawings.
- 09.0 Demonstrate ability to interpret working drawings of residential, light and heavy commercial buildings.
- 10.0 Demonstrate ability to interpret conventions, symbols, and notes on architectural working drawings.
- 11.0 Demonstrate knowledge of the relationship between working drawings, "as-builts", and actual construction.
- 12.0 Demonstrate knowledge of the construction process and materials used.
- 13.0 Demonstrate knowledge of legal foundations for fire inspections.
- 14.0 Demonstrate knowledge of the fire inspection process.
- 15.0 Demonstrate knowledge of fire inspection practices as part of an overall fire prevention program.
- 16.0 Demonstrate knowledge of fire inspection report writing.
- 17.0 Demonstrate knowledge of complaint handling and code enforcement procedures.
- 18.0 Demonstrate knowledge of special occupancies.
- 19.0 Demonstrate knowledge of unsafe conditions, fire hazards, and fire loads.
- 20.0 Demonstrate knowledge of fire behavior.
- 21.0 Demonstrate knowledge of fire cause determination.
- 22.0 Demonstrate knowledge of proper storage of flammable and combustibles.
- 23.0 Demonstrate knowledge of proper storage of hazardous materials.
- 24.0 Demonstrate knowledge of classifications, controls, and applications of automatic sprinkler systems.
- 25.0 Demonstrate knowledge of inspection practices for fire protection systems.
- 26.0 Demonstrate knowledge of classifications, controls, and applications of portable fire extinguishers.
- 27.0 Demonstrate knowledge of water supply for sprinkler and standpipe systems.
- 28.0 Demonstrate knowledge of acceptance testing for fire protection systems.
- 29.0 Identify the appropriate certifications for fire extinguishers, hood systems, sprinkler systems, and alarm devices.
- 30.0 Demonstrate knowledge of various extinguishing agents.
- 31.0 Define types of building classifications and construction types.
- 32.0 Define various loads and forces that affect buildings.
- 33.0 Demonstrate knowledge of various types of building construction and their effect on fire propagation, smoke generation, and control.
- 34.0 Define the characteristics of various building materials, with particular regard to fire resistance.
- 35.0 Define the characteristics of various building types and occupancies, with particular regard to fire load and resistance.
- 36.0 Describe principles of fire resistance, fire growth, and the behavior of fire and smoke in buildings.

Florida Department of Education  
STUDENT PERFORMANCE STANDARDS

Program Title: Fire Inspector I  
Postsecondary Number: P430204

**OCCUPATIONAL COMPLETION POINT - DATA CODE A**

Fire Inspector - SOC 33-2021  
Fire Marshal - SOC 33-2021  
Fire Protection Specialist - SOC 33-2021

01.0 DEMONSTRATE UNDERSTANDING OF THE LIFE SAFETY CODE AS APPLIED TO VARIOUS KINDS OF OCCUPANCIES--The student will be able to:

- 01.01 Identify the sections of the Life Safety Code.
- 01.02 Identify which sections apply to different types of occupancies.
- 01.03 Define key terms as used in the Life Safety Code.

02.0 DEMONSTRATE ABILITY TO LOCATE PROPER CITATIONS WITHIN THE LIFE SAFETY CODE--The student will be able to:

- 02.01 Given a set of inspection circumstances, identify the section of the Life Safety Code that applies.
- 02.02 Given a set of inspection circumstances, be able to cite the remedy as found in the Life Safety Code (LSC).

03.0 DEMONSTRATE KNOWLEDGE OF THE CONCEPT OF CODE EQUIVALENCY--The student will be able to:

- 03.01 Given a set of similar inspection circumstances, choose between available codes and standards that best apply.
- 03.02 Compare and contrast national, regional, state, and local codes and standards.

04.0 DEMONSTRATE KNOWLEDGE OF TYPES OF EGRESS AND DISTANCES REQUIRED--The student will be able to:

- 04.01 Define types and characteristics of egress in the LSC.
- 04.02 Find appropriate minimum distances to egress in the LSC.
- 04.03 Define and discuss different methods of closure for means of egress.
- 04.04 Describe appropriate markings for means of egress.

05.0 DEMONSTRATE THE ABILITY TO PROPERLY CLASSIFY TYPES OF OCCUPANCIES--The student will be able to:

- 05.01 Define and describe assembly occupancies.
- 05.02 Define and describe educational occupancies.
- 05.03 Define and describe health care occupancies.
- 05.04 Define and describe detention and correctional occupancies.
- 05.05 Define and describe residential occupancies.
- 05.06 Define and describe mercantile occupancies.
- 05.07 Define and describe business occupancies.
- 05.08 Define and describe industrial occupancies.
- 05.09 Define and describe storage occupancies.

- 06.0 DEMONSTRATE THE ABILITY TO CALCULATE THE SIZE, AREA, AND VOLUME OF COMPLEX BUILDING SHAPES--The student will be able to:
- 06.01 Calculate the size of various buildings.
  - 06.02 Calculate the area of various buildings.
  - 06.03 Calculate the volume of various buildings.
- 07.0 DEMONSTRATE ABILITY TO USE ARCHITECTURAL RULER--The student will be able to:
- 07.01 Measure various building dimensions from working drawings, using the appropriate referenced scale.
- 08.0 DEMONSTRATE RECOGNITION OF VARIOUS TYPES AND METHODS OF CONSTRUCTION AS DENOTED IN ARCHITECTURAL DRAWINGS--The student will be able to:
- 08.01 Identify markings for different types of doors.
  - 08.02 Identify markings for different types of windows.
  - 08.03 Identify markings for load-bearing and non-load-bearing walls.
  - 08.04 Identify markings for mechanical and air-handling systems.
  - 08.05 Identify markings for electrical systems.
  - 08.06 Identify markings for plumbing systems.
- 09.0 DEMONSTRATE ABILITY TO INTERPRET WORKING DRAWINGS OF RESIDENTIAL, LIGHT AND HEAVY COMMERCIAL BUILDINGS--The student will be able to:
- 09.01 Identify characteristics of residential construction plans.
  - 09.02 Identify characteristics of light commercial construction drawings.
  - 09.03 Identify characteristics of heavy commercial construction drawings.
- 10.0 DEMONSTRATE ABILITY TO INTERPRET CONVENTIONS, SYMBOLS, AND NOTES ON ARCHITECTURAL WORKING DRAWINGS--The student will be able to:
- 10.01 Identify the clearance radius for doors.
  - 10.02 Identify the width of windows and doors.
  - 10.03 Identify the movable and immovable partitions.
- 11.0 DEMONSTRATE KNOWLEDGE OF THE RELATIONSHIP BETWEEN WORKING DRAWINGS, "AS-BUILTS", AND ACTUAL CONSTRUCTION--The student will be able to:
- 11.01 Compare and contrast drawings done at each stage of construction.
  - 11.02 Compare and contrast design drawings and "as built".
  - 11.03 Discuss the importance of physical inspection during and after construction.
- 12.0 DEMONSTRATE KNOWLEDGE OF THE CONSTRUCTION PROCESS AND MATERIALS USED--The student will be able to:
- 12.01 List steps in the construction process.
  - 12.02 Identify the roles of general contractors.
  - 12.03 Identify the roles of subcontractors.
  - 12.04 Identify the principal building trades and their functions.

- 13.0 DEMONSTRATE KNOWLEDGE OF LEGAL FOUNDATIONS FOR FIRE INSPECTIONS--The student will be able to:
- 13.01 Describe applicable chapters and sections of the Florida Statutes that govern fire safety inspections.
  - 13.02 Describe applicable chapters and sections of the Florida Administrative Code that govern fire safety inspections.
- 14.0 DEMONSTRATE KNOWLEDGE OF THE FIRE INSPECTION PROCESS--The student will be able to:
- 14.01 Discuss fire inspection and its place within the fire department's organization.
  - 14.02 Define and discuss inspection and reinspection.
  - 14.03 Discuss the scheduling of fire inspections.
  - 14.04 Compare and contrast the customer service and code enforcement concepts of fire inspection.
  - 14.05 Discuss the steps of the physical fire inspection.
- 15.0 DEMONSTRATE KNOWLEDGE OF FIRE INSPECTION PRACTICES AS PART OF AN OVERALL FIRE PREVENTION PROGRAM--The student will be able to:
- 15.01 List and describe the components of a complete fire prevention program.
  - 15.02 Discuss the proactive role of the fire inspector.
  - 15.03 Discuss the educational role of the fire inspection.
- 16.0 DEMONSTRATE KNOWLEDGE OF FIRE INSPECTION REPORT WRITING--The student will be able to:
- 16.01 Define the parts of a complete fire inspection report.
  - 16.02 Discuss the proper uses of fire inspection reports.
  - 16.03 Discuss the proper handling, distribution, and retention of fire inspection reports.
  - 16.04 Prepare a draft fire inspection report to acceptable industry standards.
- 17.0 DEMONSTRATE KNOWLEDGE OF COMPLAINT HANDLING AND CODE ENFORCEMENT PROCEDURES--The student will be able to:
- 17.01 Discuss methods of handling occupant complaints relative to fire inspections.
  - 17.02 Discuss code enforcement authority of fire inspectors.
  - 17.03 Discuss code development and adoption processes.
  - 17.04 Discuss appeal process relative to code violations.
- 18.0 DEMONSTRATE KNOWLEDGE OF SPECIAL OCCUPANCIES--The student will be able to:
- 18.01 Define special occupancies.
  - 18.02 Discuss LSC applications relative to special occupancies.
  - 18.03 Discuss fire inspection practices relative to special occupancies.
- 19.0 DEMONSTRATE KNOWLEDGE OF UNSAFE CONDITIONS, FIRE HAZARDS, AND FIRE LOADS--The student will be able to:
- 19.01 Define and discuss unsafe conditions.
  - 19.02 Define and discuss fire hazards.
  - 19.03 Define and discuss fire loads.

- 20.0 DEMONSTRATE KNOWLEDGE OF FIRE BEHAVIOR--The student will be able to:
- 20.01 Define and discuss the fire triangle.
  - 20.02 Define and discuss the fire tetrahedron.
  - 20.03 Define ignition temperature.
  - 20.04 Define flammable range.
  - 20.05 Define combustion.
- 21.0 DEMONSTRATE KNOWLEDGE OF FIRE CAUSE DETERMINATION--The student will be able to:
- 21.01 Discuss how to determine the point of origin of a fire.
  - 21.02 Define and discuss "V" patterns.
  - 21.03 Define and discuss char patterns.
  - 21.04 Define and discuss smoke stains.
  - 21.05 Compare and contrast accidental and incendiary fire causes.
- 22.0 DEMONSTRATE KNOWLEDGE OF PROPER STORAGE OF FLAMMABLE AND COMBUSTIBLES--The student will be able to:
- 22.01 Define and discuss flammable materials.
  - 22.02 Define and discuss combustible materials.
  - 22.03 Discuss proper storage methods.
  - 22.04 Identify and discuss proper markings for flammable and combustible material storage areas.
- 23.0 DEMONSTRATE KNOWLEDGE OF PROPER STORAGE OF HAZARDOUS MATERIALS--The student will be able to:
- 23.01 Define and discuss hazardous materials.
  - 23.02 Define and discuss material safety data sheets.
  - 23.03 Discuss proper storage methods.
  - 23.04 Identify and discuss proper markings for hazardous materials storage areas.
- 24.0 DEMONSTRATE KNOWLEDGE OF CLASSIFICATIONS, CONTROLS, AND APPLICATIONS OF AUTOMATIC SPRINKLER SYSTEMS--The student will be able to:
- 24.01 List and define the classes of automatic sprinkler systems.
  - 24.02 Identify and describe major controls of automatic sprinkler systems.
  - 24.03 Discuss proper installation and application of automatic sprinkler systems for different classes of occupancies.
- 25.0 DEMONSTRATE KNOWLEDGE OF INSPECTION PRACTICES FOR FIRE PROTECTION SYSTEMS--The student will be able to:
- 25.01 Discuss legal requirements for fire protection system inspections.
  - 25.02 Discuss testing of fire protection systems.
- 26.0 DEMONSTRATE KNOWLEDGE OF CLASSIFICATIONS, CONTROLS, AND APPLICATIONS OF PORTABLE FIRE EXTINGUISHERS--The student will be able to:
- 26.01 List and define the classes of portable fire extinguishers.

- 26.02 Identify and describe major controls of portable fire extinguishers.
- 26.03 Discuss proper installation and application of portable fire extinguishers for different classes of occupancies.
- 27.0 DEMONSTRATE KNOWLEDGE OF WATER SUPPLY FOR SPRINKLER AND STANDPIPE SYSTEMS--The student will be able to:
  - 27.01 Identify the major parts of sprinkler systems.
  - 27.02 Identify the major parts of standpipe systems.
  - 27.03 Discuss the use of sprinkler systems in fire suppression tactics of fire departments.
  - 27.04 Discuss the use of standpipe systems in fire suppression tactics of fire departments.
  - 27.05 Discuss the water supply system for sprinklers.
  - 27.06 Discuss the water supply system for standpipes.
- 28.0 DEMONSTRATE KNOWLEDGE OF ACCEPTANCE TESTING FOR FIRE PROTECTION SYSTEMS--The student will be able to:
  - 28.01 Define acceptance testing.
  - 28.02 Define compliance testing.
  - 28.02 Discuss acceptance-testing procedures for fire protection systems.
- 29.0 IDENTIFY THE APPROPRIATE CERTIFICATIONS FOR FIRE EXTINGUISHERS, HOOD SYSTEMS, SPRINKLER SYSTEMS, AND ALARM DEVICES--The student will be able to:
  - 29.01 Identify the certification procedures for portable fire extinguishers.
  - 29.02 Identify the certification procedures for hood systems.
  - 29.03 Identify the certification procedures for sprinkler systems.
  - 29.04 Identify the certification procedures for fire alarm systems.
- 30.0 DEMONSTRATE KNOWLEDGE OF VARIOUS EXTINGUISHING AGENTS--The student will be able to:
  - 30.01 Discuss the properties of water as a fire-extinguishing agent.
  - 30.02 Discuss the properties of dry chemical as a fire-extinguishing agent.
  - 30.03 Discuss the properties of carbon dioxide as a fire-extinguishing agent.
  - 30.04 Discuss the properties of foam as a fire-extinguishing agent.
  - 30.05 Discuss the properties of halon as a fire-extinguishing agent.
- 31.0 DEFINE TYPES OF BUILDING CLASSIFICATIONS AND CONSTRUCTION TYPES--The student will be able to:
  - 31.01 Define and describe the characteristics of single-family residential construction.
  - 31.02 Define and describe the characteristics of multi-family residential construction.
  - 31.03 Define and describe the characteristics of light commercial construction.

- 31.04 Define and describe the characteristics of heavy commercial construction.
- 31.05 Define and describe the characteristics of industrial construction.
- 32.0 DEFINE VARIOUS LOADS AND FORCES THAT AFFECT BUILDINGS--The student will be able to:
  - 32.01 Define (a) vertical load, (b) sheer load, (c) tortional load, (d) compressive load, (e) tension load, (f) static load, (g) live load, and (h) fire load..
  - 32.02 Define wind pressure.
  - 32.03 Discuss windstorm provisions of building codes.
- 33.0 DEMONSTRATE KNOWLEDGE OF VARIOUS TYPES OF BUILDING CONSTRUCTION AND THEIR EFFECT ON FIRE PROPAGATION, SMOKE GENERATION, AND CONTROL--The student will be able to:
  - 33.01 Define fire propagation.
  - 33.02 Define smoke generation.
  - 33.03 Define fire control.
  - 33.04 Define balloon construction.
  - 33.05 Define tilt-slab construction.
  - 33.06 Define post-and-lintel construction.
  - 33.07 Given a particular occupancy, discuss the likely development of a fire within that type of construction.
- 34.0 DEFINE THE CHARACTERISTICS OF VARIOUS BUILDING MATERIALS, WITH PARTICULAR REGARD TO FIRE RESISTANCE--The student will be able to:
  - 34.01 Discuss the fire resistance characteristics of wood frame construction.
  - 34.02 Discuss the fire resistance characteristics of metal frame construction.
  - 34.03 Discuss the fire resistance characteristics of masonry construction.
  - 34.04 Discuss the fire resistance characteristics of concrete construction.
- 35.0 DEFINE THE CHARACTERISTICS OF VARIOUS BUILDING TYPES AND OCCUPANCIES, WITH PARTICULAR REGARD TO FIRE LOAD AND RESISTANCE--The student will be able to:
  - 35.01 Define and describe fire load and resistance in assembly occupancies.
  - 35.02 Define and describe fire load and resistance in educational occupancies.
  - 35.03 Define and describe fire load and resistance in health care occupancies.
  - 35.04 Define and describe fire load and resistance in detention and correctional occupancies.
  - 35.05 Define and describe fire load and resistance in residential occupancies.
  - 35.06 Define and describe fire load and resistance in mercantile occupancies.
  - 35.07 Define and describe fire load and resistance in business occupancies.
  - 35.08 Define and describe fire load and resistance in industrial occupancies.

- 35.09 Define and describe fire load and resistance in storage occupancies.
- 36.0 DESCRIBE PRINCIPLES OF FIRE RESISTANCE, FIRE GROWTH, AND THE BEHAVIOR OF FIRE AND SMOKE IN BUILDINGS--The student will be able to:
- 36.01 Define fire resistance.
  - 36.02 Define fire growth.
  - 36.03 Define fire spread.
  - 36.04 Define smoke propagation.