

## **National Fire Academy Criteria for Contract Instructor Selection**

**Course: Fire Inspection Principles 2: Inspection of Structures and Systems (R/N0391)**

### **Curriculum: Fire Prevention: Technical**

This foundational-level, 6-day course introduces the student to the fundamental methodology for application of the requirements for fire protection systems including detection, notification, fire control and extinguishment, and mitigation of fire-related hazards, with special emphasis on fire alarm and fire suppression systems. Although it contains many of the basic principles of code enforcement, more experienced code inspectors and officials might find it useful as a review of essential methodologies and an update to current code enforcement applications. It is not the intent of this course to present specific code requirements; it focuses more on the methodology of the use of these requirements.

### **Criteria for Contract Instructor Selection**

All new contract instructors or those wishing to expand their teaching portfolio must be instructionally dedicated to the Fire Prevention: Technical curriculum and cannot cross boundaries teaching in other National Fire Academy (NFA) curricula. Interest with other curricula will signal a voluntary withdrawal of teaching privileges from the Fire Prevention: Technical courses.

This curriculum teaches finely detailed and meticulously specific content concerning construction and maintenance codes, standards, guides, recommended practices, testing criteria, and manufacturers' specifications for the built environment. Instructors must be national subject matter experts, as compared to a local, fundamentally strong code enforcer, since the country has a geographically diverse array of students and code requirements.

A major characteristic necessary to serve in this instructional capacity is the willingness to coach the student cadre to success. The philosophy of the instructor is to mentor less knowledgeable individuals by transferring highly detailed information, using verbal skills coupled with visual graphics, to propel them to excellence. This curriculum does not support self-absorbed instructors appeasing their own interests but is squarely focused on the student-centered learning outcome.

All new contract instructors shall be evaluated in 3 consecutive course deliveries in accordance with the NFA's Contract Instructor Evaluation program. Existing contract instructors are subject to evaluation in accordance with this program.

**1. Academic Requirement**

- a. Bachelor’s degree from an institution that is accredited in fire protection technology, fire administration, fire science or similar program. Candidates are encouraged to have successfully completed this course in the last 3 years and/or served as an adjunct instructor (in training) in the course.
- b. Candidates with an associate degree from an institution that is accredited in fire protection technology, fire administration, fire science or similar program will be entertained on a case-by-case basis. Additional formal education consisting of 1 semester each of college-level algebra, fire protection hydraulics and physics must have been successfully completed. Candidates are encouraged to have successfully completed this course in the last 3 years and/or served as an adjunct instructor (in training) in the course.

**2. Documented Technical Knowledge and Relevant Experience**

- a. The candidate must have extensive experience as a fire inspector of fire protection systems for a local, state or national entity that is legally responsible for the enforcement of building and/or fire codes. Provide specific, quantifiable and qualifiable (simplistic to complex) examples of work performed and the codes and standards (editions) utilized. Experience as a tradesperson working in the industry with the process of installation, inspecting, testing and maintenance is an acceptable alternative. List the examples in a tabular format such as:

| <b>Project name</b>         | <b>Value, square footage or description</b>   | <b>Codes and editions</b>                     | <b>Year</b> |
|-----------------------------|---|---|-------------|
| Acme Hotel                  | 7-story high-rise hotel including swimming pool, restaurant and integrated parking garage, \$50 million | 2018 IFC, 2016 NFPA 13, 2016 NFPA 72, NFPA 96 | 2020        |
| ACME Hardware and Warehouse | 500,000-square-foot mercantile store and warehouse  | 2021 IBC, 2019 NFPA 13                        | Current     |

- b. The candidate should be experienced, proficient and knowledgeable of current issues in the field of expertise for the content of this course. Active participation with relevant national code and/or standard committees, such as National Fire Protection Association (NFPA) and International Code Council (ICC) committees or state committees for adoption of building and fire codes, is highly recommended. List the examples in a tabular format such as:

| <b>Committees</b>   | <b>Year(s)</b> |
|---|----------------|
| NFPA 1, Building Systems and Special Occupancies subcommittee (alternate) | 2016-present   |
| Maryland State Fire Prevention Committee – Code Update                    | 2018           |

- c. The candidate should have the necessary education and experience to be capable of presenting all units of the course. It is recognized that exceptions may occur where courses are of such a technical nature that no one person may be technically competent to instruct all units. Verifiable examples of professional licensure such as Professional Engineer can be provided. Professional certificates such as National Institute for Certification in Engineering Technologies (NICET) Inspection and Testing of Fire Alarm Systems, Level II; NICET Inspection and Testing of Water-Based Systems, Level II or III; NICET Special Hazards Systems, Level II, III or IV; NFPA Certified Water-Based Fire Protection System Inspection, Testing and Maintenance; Certified Fire Protection Specialist; Certified Building Official; Certified Fire Marshal; and ICC or NFPA Fire Inspector can be submitted. State fire inspector certificates have differing requirements which may or may not be recognized nationally. Only national certificates will be recognized. List the information in a tabular format such as:

| <b>Licenses</b>                      | <b>Regulatory body</b> | <b>Dates</b> |
|--------------------------------------|------------------------|--------------|
| Professional Engineer                | Maryland               | 1994-current |
| NICET Water-Based Level IV           | NICET                  | 2005-2015    |
| <b>Certifications</b>                | <b>Organization</b>    | <b>Dates</b> |
| Certified Building Official          | ICC                    | 2000-current |
| Certified Fire Protection Specialist | NFPA                   | 2001-current |

- d. Current expertise with fire alarm systems including main control panels, booster or notification appliance circuit panels, initiating devices, notification devices, signal line circuits, wiring requirements, monitoring arrangements, auxiliary functions, and intersystem operability. Provide a narrative to support your knowledge and experience.
- e. Extensive knowledge for the inspection, testing and maintenance of water-based fire protection systems and components including, but not limited to, automatic fire sprinkler systems, standpipe systems, fire pumps, water supply systems including fire hydrants, and water mist systems. Provide a narrative to support your knowledge and experience.
- f. Knowledge of the design parameters, physical arrangement, installation and operation of smoke management systems. Provide a narrative to support your knowledge and experience.
- g. Experience with the installation, acceptance testing and maintenance of dry and wet chemical extinguishing systems including commercial kitchen exhaust hood designs and operation. Provide a narrative to support your knowledge and experience.

- h. Expert-level knowledge of special agent fire protection systems including clean agents, halogenated systems, hybrid water and inert gas systems, and carbon dioxide systems. Provide a narrative to support your knowledge and experience.

### 3. Documented Educational Instruction and Experience

Accepted formal instructional training, such as:

- a. State fire training certificate and courses taught with frequency/history. List the information in a tabular format such as:

| <b>Certificates</b>             | <b>Year Completed</b> |
|---------------------------------|-----------------------|
| Fire Instructor I (PA)          | 2015                  |
| Fire Instructor II (MD)         | 2016                  |
| IFSAC Fire Service Instructor I | 2015                  |
| Pro Board Fire Instructor II    | 2017                  |

- b. College instructor/professor's credential with courses designed/instructed. List the information in a tabular format such as:

| <b>Institution</b>        | <b>Credential</b> | <b>Courses</b>                   |
|---------------------------|-------------------|----------------------------------|
| University of Maryland    | Lecturer          | Fire Protection Hydraulics       |
| Oklahoma State University | Adjunct Faculty   | Building Construction Components |

- c. College education instruction courses with a transcript supplied. List the information in a tabular format such as:

| <b>Institution</b>                   | <b>Course number</b> | <b>Course name</b>                   |
|--------------------------------------|----------------------|--------------------------------------|
| University of Maryland               | TLPL 101             | Inquiry Approach to Teaching STEM    |
| University of Maryland Global Campus | EDTP 600             | Foundations of Teaching for Learning |

- d. A minimum of 48 hours of detailed, documented and successful fire/emergency services instruction listing each course and dates of delivery. List the information in a tabular format such as:

| <b>Courses</b>              | <b>Frequency/history</b>                            |
|-----------------------------|---|
| Firefighter I (120 hours)   | Once/January 2015-May 2015                          |
| Fire Inspector 1 (40 hours) | October 2016, April 2017, August 2017, January 2018 |

- e. Speaking engagements and/or presentations at national/state conferences for the fire service or other relevant professional organizations with a listing of topics and dates.

| Conference                 | Topic                    | Year |
|----------------------------|--------------------------|------|
| NFPA Annual Conference     | NFPA 25 Proposed Changes | 2020 |
| ICC Expo and Code Hearings | Marijuana Code Concerns  | 2019 |

**4. Continuing Practice or Education**

Ability to maintain currency in the field and the specific course by:

- a. Teaching a similar course at a training academy, college or university.
- b. Taking a similar course within the last 5 years.
- c. Developing a similar course within the last 5 years.
- d. Teaching the course at the NFA or in the field within the last 2 years.
- e. Writing and researching a paper or article related to the course topic for at least 1 of the fire service or related disciplines’ trade journals within the last 2 years.
- f. Attending and/or speaking at a conference related to the field at the local, state, tribal or national level within the last 3 years.
- g. Active participation with local/state/national building/fire code(s) or standard(s) committee(s).

Failure to provide approved documentation of ongoing training or instruction may result in revocation of the contract instructor status.

**5. How To Submit a Portfolio**

Follow the instructions located on the website:

[https://www.usfa.fema.gov/training/nfa/instructors\\_officials/criteria.html](https://www.usfa.fema.gov/training/nfa/instructors_officials/criteria.html).

A portfolio addressing all of the previous items must be submitted to: [fema-nfainstructorapp@fema.dhs.gov](mailto:fema-nfainstructorapp@fema.dhs.gov).