National Fire Academy Criteria for Contract Instructor Selection

Course: Commercial Fire Sprinkler System Plans Review (R0263)

Curriculum: Fire Prevention: Technical

This advanced-level, rigorous, 5-day course will enable students to perform a shop drawing review to evaluate the suitability of the fire sprinkler plans and hydraulic calculations in accordance with nationally recognized standards for design and installation. Course content covers fire protection standards, shop drawing reading, water supplies, building envelope features, fire protection hydraulic mathematics and wet type sprinkler system components. There is significant pre-course work, graded activities and a final project.

Criteria for Contract Instructor Selection

All new contract instructors or those existing instructors wishing to expand their teaching portfolio must be dedicated instructionally 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 of coaching 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. The candidate should possess a master’s degree in fire protection engineering or another closely related field from an accredited institution. Candidates are encouraged to successfully complete this course in the last 3 years and/or serve as an adjunct instructor (in training) in the course.
b. Consideration will also be given to those candidates with a bachelor’s degree from an accredited institution that confers a degree in fire protection engineering, fire protection technology, fire administration, fire science or similar program. All candidates should have at least 1 semester of each of the following courses: algebra, fire protection hydraulics and physics. Candidates are encouraged to successfully complete this course in the last 3 years and/or serve 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 sprinkler system plans examiner for a local, state or national entity that is legally responsible for the enforcement of building and fire codes. Provide specific, quantifiable and qualifiable (simplistic to complex) examples of work performed and the codes and standards (editions) utilized. Experience as a sprinkler design professional working through the process of designing, coordinating with other trade disciplines and submitting designs for permits is an acceptable alternative.

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.

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 Water-Based Systems Layout, Levels III or IV; NFPA-certified Water-Based Systems Professional; or ICC Commercial Fire Sprinkler Plans Examiner can be submitted.

d. Experienced, proficient and knowledgeable of current issues in the field of expertise with reviewing/designing sprinkler shop drawings and verifying/performing hydraulic calculations.

e. Current knowledge of hydraulic calculation programs incorporating Hazen Williams or Darcy-Weibach formulas.

g. Current knowledge of the behavior of fire and its effects on building materials; sprinkler systems, fire, heat and smoke spread and travel in a structure; building construction classifications; and principles of protecting fire hazards listed by NFPA 13 classifications.

3. Documented Educational Instruction and Experience

Accepted formal instructional training, such as:

a. State fire training certificate and courses taught with frequency/history.
b. College instructor’s/professor’s credential with courses designed/instructed.
c. College education instruction courses with a transcript supplied.
d. A minimum of 48 hours of detailed, documented and successful fire/emergency services instruction listing each course and dates of delivery.
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.

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. Or, 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**.

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