

# NFPA 1041

## Standard for Fire Service Instructor Professional Qualifications

### 2002 Edition



NFPA, 1 Batterymarch Park, PO Box 9101, Quincy, MA 02269-9101  
An International Codes and Standards Organization

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**NFPA 1041**  
**Standard for**  
**Fire Service Instructor Professional Qualifications**  
**2002 Edition**

This edition of NFPA 1041, *Standard for Fire Service Instructor Professional Qualifications*, was prepared by the Technical Committee on Fire Service Instructor Professional Qualifications, released by the Technical Correlating Committee on Professional Qualifications, and acted on by NFPA at its November Association Technical Meeting held November 10–14, 2001, in Dallas, TX. It was issued by the Standards Council on January 11, 2002, with an effective date of January 31, 2002, and supersedes all previous editions.

This edition of NFPA 1041 was approved as an American National Standard on January 31, 2002.

**Origin and Development of NFPA 1041**

In 1971, the Joint Council of National Fire Service Organizations (JCNFSO) created the National Professional Qualifications Board for the Fire Service (NPQB) to facilitate the development of nationally applicable performance standards for uniformed fire service personnel. On December 14, 1972, the Board established four technical committees to develop those standards using the National Fire Protection Association (NFPA) standards-making system. The initial committees addressed the following career areas: fire fighter, fire officer, fire service instructor, and fire inspector and investigator.

In compliance with this direction, the Technical Committee for Fire Service Instructor Qualifications met in several general sessions and subcommittee sessions during 1973, 1974, and 1975. A survey was conducted through the State Directors of Fire Service Training in an effort to obtain information on existing qualifications for fire service instructor. Much material was reviewed by the committee. Through this information and much committee deliberation, and through the courtesy of the Delaware State Fire School, a flow chart of a training program was constructed. From this chart the committee identified four distinct levels of instructor responsibilities: (1) to teach, (2) to develop teaching material, (3) to supervise the teaching staff and program, and (4) to manage, budget, and implement the program. From this the committee has endeavored to establish a series of objectives for four instructor levels and identify curriculum that would aid instructor candidates in meeting these objectives.

In the report of the Wingspread Conference, 1966, certain criteria for Fire Service Professionalization were adopted. One criterion stated was “Professionalization Begins with Education.” To this end, keeping in mind that the quality of any educational program is only as good as its instructional staff, the Fire Service Professional Standards Committee for Fire Service Instructor Qualifications dedicates these standards.

This standard was first issued in 1976 and was revised by the Fire Service Instructor Qualifications Committee in 1981 and 1987.

The original concept of the professional qualification standards, as directed by the JCNFSO and the NPQB, was to develop an interrelated set of performance standards specifically for the fire service. The various levels of achievement in the standards were to build on each other within a strictly defined career ladder. In the late 1980s, revisions of the standards recognized that the documents should stand on their own merit in terms of job performance requirements for a given field. Accordingly, the strict career ladder concept was abandoned, except for the progression from fire fighter to fire officer. The later revisions, therefore, facilitated the use of the documents by other than the uniformed fire services.

In 1990, responsibility for the appointment of professional qualifications committees and the development of the professional qualifications standards was assumed by the NFPA.

The Correlating Committee on Professional Qualifications was appointed by the NFPA Standards Council in 1990 and assumed the responsibility for coordinating the requirements of all of the professional qualifications documents.

The intent of the technical committee was to develop clear and concise job performance requirements that can be used to determine that an individual, when measured to the standard, possesses the skills and knowledge to perform as a fire service instructor. The committee further contends that these job performance requirements can be used in any fire department in any city, town, or private organization throughout North America.

The 1996 edition of the standard was revised based on a complete job task analysis for the position of fire service instructor. The document was reformatted into a Job Performance Requirement (JPR) format. All JPRs were reviewed to ensure they were up-to-date and job related.

The Level IV instructor requirements were dropped as these essentially dealt with managing a training program. The technical committee was asked to concentrate on the requirements for the instructor/developer, and not get into management issues pertaining to administering and running a training program.

For the 2002 edition, the 1996 edition of the standard was reviewed by the technical committee, and the document was formatted to comply with the new NFPA *Manual of Style*. The committee added several small changes to the document at Report on Proposals (ROP), and there were no additional changes at Report on Comments (ROC).

**In Memoriam, September 11, 2001**

We pay tribute to the 343 members of FDNY who gave their lives to save civilian victims on September 11, 2001, at the World Trade Center. They are true American heroes in death, but they were also American heroes in life. We will keep them in our memory and in our hearts. They are the embodiment of courage, bravery, and dedication. May they rest in peace.

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**Committee Scope:** This Committee shall have primary responsibility for the management of the NFPA Professional Qualifications Project and documents related to professional qualifications for fire service, public safety, and related personnel.

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*These lists represent the membership at the time the Committees were balloted on the final text of this edition. Since that time, changes in the membership may have occurred. A key to classifications is found at the back of the document.*

Note: Membership on a committee shall not in and of itself constitute an endorsement of the Association or any document developed by the committee on which the member serves.

**Contents**

<b>Chapter 1 Administration</b> .....	<b>1041- 6</b>	5.2 Program Management .....	<b>1041- 8</b>
1.1 Scope .....	<b>1041- 6</b>	5.3 Instructional Development .....	<b>1041- 8</b>
1.2 Purpose .....	<b>1041- 6</b>	5.4 Instructional Delivery .....	<b>1041- 9</b>
1.3 General .....	<b>1041- 6</b>	5.5 Evaluation and Testing .....	<b>1041- 9</b>
<b>Chapter 2 Referenced Publications (Reserved)</b> ...	<b>1041- 6</b>	<b>Chapter 6 Instructor III</b> .....	<b>1041- 9</b>
<b>Chapter 3 Definitions</b> .....	<b>1041- 6</b>	6.1 General .....	<b>1041- 9</b>
3.1 General .....	<b>1041- 6</b>	6.2 Program Management .....	<b>1041- 9</b>
3.2 NFPA Official Definitions .....	<b>1041- 6</b>	6.3 Instructional Development .....	<b>1041-10</b>
3.3 General Definitions .....	<b>1041- 6</b>	6.4 Instructional Delivery .....	<b>1041-10</b>
<b>Chapter 4 Instructor I</b> .....	<b>1041- 7</b>	6.5 Evaluation and Testing .....	<b>1041-10</b>
4.1 General .....	<b>1041- 7</b>	<b>Annex A Explanatory Material</b> .....	<b>1041-10</b>
4.2 Program Management .....	<b>1041- 7</b>	<b>Annex B Management of Training Programs</b> .....	<b>1041-12</b>
4.3 Instructional Development .....	<b>1041- 7</b>	<b>Annex C Explanation of the Standard and</b> <b>Concepts of JPRs</b> .....	<b>1041-12</b>
4.4 Instructional Delivery .....	<b>1041- 7</b>	<b>Annex D Informational References</b> .....	<b>1041-15</b>
4.5 Evaluation and Testing .....	<b>1041- 7</b>	<b>Index</b> .....	<b>1041-17</b>
<b>Chapter 5 Instructor II</b> .....	<b>1041- 8</b>		
5.1 General .....	<b>1041- 8</b>		



**NFPA 1041****Standard for****Fire Service Instructor Professional Qualifications****2002 Edition**

NOTICE: An asterisk (\*) following the number or letter designating a paragraph indicates that explanatory material on the paragraph can be found in Annex A.

Changes other than editorial are indicated by a vertical rule beside the paragraph, table, or figure in which the change occurred. These rules are included as an aid to the user in identifying changes from the previous edition. Where one or more complete paragraphs have been deleted, the deletion is indicated by a bullet between the paragraphs that remain.

A reference in brackets [ ] following a section or paragraph indicates material that has been extracted from another NFPA document. As an aid to the user, Annex D lists the complete title and edition of the source documents for both mandatory and nonmandatory extracts. Editorial changes to extracted material consist of revising references to an appropriate division in this document or the inclusion of the document number with the division number when the reference is to the original document. Requests for interpretations or revisions of extracted text shall be sent to the appropriate technical committee.

Information on referenced publications can be found in Chapter 2 and Annex D.

**Chapter 1 Administration**

**1.1 Scope.** This standard identifies the professional levels of competence required of fire service instructors.

**1.2 Purpose.** The purpose of this standard is to provide minimum qualifications for fire service instructors.

**1.2.1** It is not the intent of this standard to restrict any jurisdiction from exceeding these minimum requirements.

**1.2.2** This standard shall cover the requirements for three levels of progression, that is, Fire Service Instructor I, Fire Service Instructor II, and Fire Service Instructor III.

**1.3\* General.**

**1.3.1** All job performance requirements for any level of fire service instructor shall be performed to a level of competence that shall be established by the authority having jurisdiction.

**1.3.2** It is not required that the job performance requirements be mastered in the order that they appear in each of the levels of progression.

**1.3.3\*** The authority having jurisdiction shall select instructors who have appropriate subject matter skill, knowledge, and ability. The authority having jurisdiction shall establish a policy and process that identifies and verifies the minimum experience and training requirements necessary to instruct any topic or subject matter.

**1.3.4** Fire service instructors at all levels of progression shall know their roles and responsibilities to the authority having

jurisdiction and their students as defined in the agencies policies and procedures.

**1.3.5\*** Fire service instructors at all levels of progression shall remain current and comply with all applicable laws, regulations, and standards applying to the delivery of training.

**1.3.6\*** The performance of each requirement of this standard shall be evaluated by individuals approved by the authority having jurisdiction.

**1.3.7** The fire service instructor at all levels of certification shall remain current with trends in training and maintain professional competency through continuing education, networking, instructional development and delivery, and membership in professional organizations.

**Chapter 2 Referenced Publications (Reserved)****Chapter 3 Definitions**

**3.1\* General.** The definitions contained in this chapter shall apply to the terms used in this standard. Where terms are not included, common usage of the terms shall apply.

**3.2 NFPA Official Definitions.**

**3.2.1\* Approved.** Acceptable to the authority having jurisdiction.

**3.2.2\* Authority Having Jurisdiction (AHJ).** The organization, office, or individual responsible for approving equipment, materials, an installation, or a procedure.

**3.2.3 Shall.** Indicates a mandatory requirement.

**3.3 General Definitions.**

**3.3.1 Duty.** A major subdivision of the work performed by one individual.

**3.3.2 Instructor Classification.**

**3.3.2.1 Instructor I.** A fire service instructor who has demonstrated the knowledge and ability to deliver instruction effectively from a prepared lesson plan, including instructional aids and evaluation instruments; adapt lesson plans to the unique requirements of the students and authority having jurisdiction; organize the learning environment so that learning is maximized; and meet the record-keeping requirements of authority having jurisdiction.

**3.3.2.2 Instructor II.** A fire service instructor who, in addition to meeting Instructor I qualifications, has demonstrated the knowledge and ability to develop individual lesson plans for a specific topic including learning objectives, instructional aids, and evaluation instruments; schedule training sessions based on overall training plan of authority having jurisdiction; and supervise and coordinate the activities of other instructors.

**3.3.2.3 Instructor III.** A fire service instructor who, in addition to meeting Instructor II qualifications, has demonstrated the knowledge and ability to develop comprehensive training curriculum and programs for use by single or multiple organizations; conduct organization needs analysis; and develop training goals and implementation strategies.

**3.3.3 Job Performance Requirement.** A statement that describes a specific job task, lists the items necessary to complete

the task, and defines measurable or observable outcomes and evaluation areas for the specific task. [1000:2.1.6]

**3.3.4 Task.** A specific job behavior or activity. [1002:1.4]

## Chapter 4 Instructor I

### 4.1 General.

**4.1.1** For certification at Fire Instructor Level I, the candidate shall meet the job performance requirements defined in Sections 4.2 through 4.5.

### 4.2 Program Management.

**4.2.1 Definition of Duty.** The management of basic resources and the records and reports essential to the instructional process.

**4.2.2** Assemble course materials, given a specific topic, so that the lesson plan, all materials, resources, and equipment needed to deliver the lesson are obtained.

**(A) Requisite Knowledge.** Components of a lesson plan; policies and procedures for the procurement of materials and equipment and resource availability.

**(B) Requisite Skills.** None required.

**4.2.3** Prepare training records and report forms, given policies and procedures and forms, so that required reports are accurately completed and submitted in accordance with the procedures.

**(A) Requisite Knowledge.** Types of records and reports required; policies and procedures for processing records and reports.

**(B) Requisite Skills.** Basic report writing and record completion.

### 4.3 Instructional Development.

**4.3.1\* Definition of Duty.** The review and adaptation of prepared instructional materials.

**4.3.2\*** Review instructional materials, given the materials for a specific topic, target audience and learning environment, so that elements of the lesson plan, learning environment, and resources that need adaptation are identified.

**(A) Requisite Knowledge.** Recognition of student limitations, methods of instruction, types of resource materials; organizing the learning environment; policies and procedures.

**(B) Requisite Skills.** Analysis of resources, facilities, and materials.

**4.3.3\*** Adapt a prepared lesson plan, given course materials and an assignment, so that the needs of the student and the objectives of the lesson plan are achieved.

**(A)\* Requisite Knowledge.** Elements of a lesson plan, selection of instructional aids and methods, origination of learning environment.

**(B) Requisite Skills.** Instructor preparation and organizational skills.

### 4.4 Instructional Delivery.

**4.4.1 Definition of Duty.** The delivery of instructional sessions utilizing prepared course materials.

**4.4.2** Organize the classroom, laboratory or outdoor learning environment, given a facility and an assignment, so that lighting, distractions, climate control or weather, noise control, seating, audiovisual equipment, teaching aids, and safety are considered.

**(A) Requisite Knowledge.** Classroom management and safety, advantages and limitations of audiovisual equipment and teaching aids, classroom arrangement, and methods and techniques of instruction.

**(B) Requisite Skills.** Use of instructional media and materials.

**4.4.3** Present prepared lessons, given a prepared lesson plan that specifies the presentation method(s), so that the method(s) indicated in the plan are used and the stated objectives or learning outcomes are achieved.

**(A) Requisite Knowledge.** The laws and principles of learning, teaching methods and techniques, lesson plan components and elements of the communication process, and lesson plan terminology and definitions.

**(B) Requisite Skills.** Oral communication techniques, teaching methods and techniques, utilization of lesson plans in the instructional setting.

**4.4.4\*** Adjust presentation, given a lesson plan and changing circumstances in the class environment, so that class continuity and the objectives or learning outcomes are achieved.

**(A) Requisite Knowledge.** Methods of dealing with changing circumstances.

**(B) Requisite Skills.** None required.

**4.4.5** Adjust to differences in learning styles, abilities and behaviors, given the instructional environment, so that lesson objectives are accomplished, disruptive behavior is addressed, and a safe learning environment is maintained.

**(A)\* Requisite Knowledge.** Motivation techniques, learning styles, types of learning disabilities and methods for dealing with them, methods of dealing with disruptive and unsafe behavior.

**(B) Requisite Skills.** Basic coaching and motivational techniques, adaptation of lesson plans or materials to specific instructional situations.

**4.4.6** Operate audiovisual equipment, and demonstration devices, given a learning environment and equipment, so that the equipment functions properly.

**(A) Requisite Knowledge.** Components of audiovisual equipment.

**(B) Requisite Skills.** Use of audiovisual equipment, cleaning, and field level maintenance.

**4.4.7** Utilize audiovisual materials, given prepared topical media and equipment, so that the intended objectives are clearly presented, transitions between media and other parts of the presentation are smooth, and media are returned to storage.

**(A) Requisite Knowledge.** Media types, limitations, and selection criteria.

**(B) Requisite Skills.** Transition techniques within and between media.

### 4.5 Evaluation and Testing.

**4.5.1\* Definition of Duty.** The administration and grading of student evaluation instruments.

**4.5.2** Administer oral, written, and performance tests, given the lesson plan, evaluation instruments, and the evaluation procedures of the agency, so that the testing is conducted according to procedures and the security of the materials is maintained.

**(A) Requisite Knowledge.** Test administration, agency policies, laws affecting records and disclosure of training information, purposes of evaluation and testing, and performance skills evaluation.

**(B) Requisite Skills.** Use of skills checklists and oral questioning techniques.

**4.5.3** Grade student oral, written, or performance tests, given class answer sheets or skills checklists and appropriate answer keys, so the examinations are accurately graded and properly secured.

**(A) Requisite Knowledge.** Grading and maintaining confidentiality of scores.

**(B) Requisite Skills.** None required.

**4.5.4** Report test results, given a set of test answer sheets or skills checklists, a report form and policies and procedures for reporting, so that the results are accurately recorded, the forms are forwarded according to procedure, and unusual circumstances are reported.

**(A) Requisite Knowledge.** Reporting procedures, the interpretation of test results.

**(B) Requisite Skills.** Communication skills, basic coaching.

**4.5.5\*** Provide evaluation feedback to students, given evaluation data, so that the feedback is timely, specific enough for the student to make efforts to modify behavior, objective, clear, and relevant; include suggestions based on the data.

**(A) Requisite Knowledge.** Reporting procedures, the interpretation of test results.

**(B) Requisite Skills.** Communication skills, basic coaching.

## Chapter 5 Instructor II

**5.1 General.** For certification at Level II, the Fire Instructor I shall meet the job performance requirements defined in Sections 5.2 through 5.5 of this standard.

### 5.2 Program Management.

**5.2.1 Definition of Duty.** The management of instructional resources, staff, facilities, and records and reports.

**5.2.2** Schedule instructional sessions, given department scheduling policy, instructional resources, staff, facilities and timeline for delivery, so that the specified sessions are delivered according to department policy.

**(A) Requisite Knowledge.** Departmental policy, scheduling processes, supervision techniques, and resource management.

**(B) Requisite Skills.** None required.

**5.2.3** Formulate budget needs, given training goals, agency budget policy, and current resources, so that the resources required to meet training goals are identified and documented.

**(A) Requisite Knowledge.** Agency budget policy, resource management, needs analysis, sources of instructional materials, and equipment.

**(B) Requisite Skills.** Resource analysis and forms completion.

**5.2.4** Acquire training resources, given an identified need, so that the resources are obtained within established timelines, budget constraints, and according to agency policy.

**(A) Requisite Knowledge.** Agency policies, purchasing procedures, budget management.

**(B) Requisite Skills.** Forms completion.

**5.2.5** Coordinate training record keeping, given training forms, department policy, and training activity, so that all agency and legal requirements are met.

**(A) Requisite Knowledge.** Record keeping processes, departmental policies, laws affecting records and disclosure of training information, professional standards applicable to training records, databases used for record keeping.

**(B) Requisite Skills.** Record auditing procedures.

**5.2.6** Evaluate instructors, given an evaluation form, department policy, and job performance requirements, so that the evaluation identifies areas of strengths and weaknesses, recommends changes in instructional style and communication methods, and provides opportunity for instructor feedback to the evaluator.

**(A) Requisite Knowledge.** Personnel evaluation methods, supervision techniques, department policy, effective instructional methods and techniques.

**(B) Requisite Skills.** Coaching, observation techniques, completion of evaluation forms.

### 5.3 Instructional Development.

**5.3.1 Definition of Duty.** The development of instructional materials for specific topics.

**5.3.2** Create a lesson plan, given a topic, audience characteristics, and a standard lesson plan format, so that the job performance requirements for the topic are achieved, and the plan includes learning objectives, a lesson outline, course materials, instructional aids, and an evaluation plan.

**(A) Requisite Knowledge.** Elements of a lesson plan, components of learning objectives, instructional methods and techniques, characteristics of adult learners, types and application of instructional media, evaluation techniques, and sources of references and materials.

**(B) Requisite Skills.** Basic research, using job performance requirements to develop behavioral objectives, student needs assessment, development of instructional media, outlining techniques, evaluation techniques, and resource needs analysis.

**5.3.3** Modify an existing lesson plan, given a topic, audience characteristics, and a lesson plan, so that the job performance requirements for the topic are achieved, and the plan includes learning objectives, a lesson outline, course materials, instructional aids, and an evaluation plan.

**(A) Requisite Knowledge.** Elements of a lesson plan, components of learning objectives, instructional methods and techniques, characteristics of adult learners, types and application of instructional media, evaluation techniques, and sources of references and materials.

**(B) Requisite Skills.** Basic research, using job performance requirements to develop behavioral objectives, student needs assessment, development of instructional media, outlining techniques, evaluation techniques, and resource needs analysis.

#### 5.4 Instructional Delivery.

**5.4.1 Definition of Duty.** Conducting classes using a lesson plan.

**5.4.2** Conduct a class using a lesson plan that the instructor has prepared and that involves the utilization of multiple teaching methods and techniques, given a topic and a target audience, so that the lesson objectives are achieved.

**(A) Requisite Knowledge.** Use and limitations of teaching methods and techniques.

**(B)\* Requisite Skills.** Transition between different teaching methods, conference, and discussion leadership.

**5.4.3\*** Supervise other instructors and students during training, given a training scenario with increased hazard exposure, so that applicable safety standards and practices are followed, and instructional goals are met.

**(A) Requisite Knowledge.** Safety rules, regulations and practices, the incident command system used by the agency, and leadership techniques.

**(B) Requisite Skills.** Implementation of an incident management system used by the agency.

#### 5.5 Evaluation and Testing.

**5.5.1 Definition of Duty.** The development of student evaluation instruments to support instruction and the evaluation of test results.

**5.5.2** Develop student evaluation instruments, given learning objectives, audience characteristics, and training goals, so that the evaluation instrument determines if the student has achieved the learning objectives, the instrument evaluates performance in an objective, reliable, and verifiable manner, and the evaluation instrument is bias free to any audience or group.

**(A) Requisite Knowledge.** Evaluation methods, development of forms, effective instructional methods, and techniques.

**(B) Requisite Skills.** Evaluation item construction and assembly of evaluation instruments.

**5.5.3** Develop a class evaluation instrument, given agency policy and evaluation goals, so that students have the ability to provide feedback to the instructor on instructional methods, communication techniques, learning environment, course content, and student materials.

**(A) Requisite Knowledge.** Evaluation methods, test validity.

**(B) Requisite Skills.** Development of evaluation forms.

**5.5.4** Analyze student evaluation instruments, given test data, objectives and agency policies, so that validity is determined and necessary changes are accomplished.

**(A) Requisite Knowledge.** Test validity, reliability, and item analysis.

**(B) Requisite Skills.** Item analysis techniques.

## Chapter 6 Instructor III

**6.1 General.** For certification at Level III, the Fire Instructor II shall meet the job performance requirements defined in Sections 6.2 through 6.5 of this standard.

### 6.2 Program Management.

**6.2.1 Definition of Duty.** The administration of agency policies and procedures for the management of instructional resources, staff, facilities, records, and reports.

**6.2.2\*** Administer a training record system, given agency policy and type of training activity to be documented, so that the information captured is concise, meets all agency and legal requirements, and can be readily accessed.

**(A) Requisite Knowledge.** Agency policy, record-keeping systems, professional standards addressing training records, legal requirements affecting record keeping, and disclosure of information.

**(B) Requisite Skills.** Development of forms, report generation.

**6.2.3** Develop recommendations for policies to support the training program, given agency policies and procedures and the training program goals, so that the training and agency goals are achieved.

**(A) Requisite Knowledge.** Agency procedures and training program goals, format for agency policies.

**(B) Requisite Skills.** Technical writing.

**6.2.4** Select instructional staff, given personnel qualifications, instructional requirements, and agency policies and procedures, so that staff selection meets agency policies and achievement of agency and instructional goals.

**(A) Requisite Knowledge.** Agency policies regarding staff selection, instructional requirements, selection methods, the capabilities of instructional staff and agency goals.

**(B) Requisite Skills.** Evaluation techniques.

**6.2.5** Construct a performance-based instructor evaluation plan, given agency policies and procedures and job requirements, so that instructors are evaluated at regular intervals, following agency policies.

**(A) Requisite Knowledge.** Evaluation methods, agency policies, staff schedules, and job requirements.

**(B) Requisite Skills.** Evaluation techniques.

**6.2.6** Write equipment purchasing specifications, given curriculum information, training goals, and agency guidelines, so that the equipment is appropriate and supports the curriculum.

**(A) Requisite Knowledge.** Equipment purchasing procedures, available department resources and curriculum needs.

**(B) Requisite Skills.** Evaluation methods to select the equipment that is most effective and preparation of procurement forms.

**6.2.7** Present evaluation findings, conclusions, and recommendations to agency administrator, given data summaries and target audience, so that recommendations are unbiased, supported, and reflect agency goals, policies, and procedures.

**(A) Requisite Knowledge.** Statistical evaluation procedures and agency goals.



**(B) Requisite Skills.** Presentation skills and report preparation following agency guidelines.

### 6.3 Instructional Development.

**6.3.1 Definition of Duty.** Plans, develops, and implements comprehensive programs and curriculum.

**6.3.2** Conduct an agency needs analysis, given agency goals, so that instructional needs are identified.

**(A) Requisite Knowledge.** Needs analysis, task analysis, development of job performance requirements, lesson planning, instructional methods, characteristics of adult learners, instructional media, curriculum development, and development of evaluation instruments.

**(B) Requisite Skills.** Conducting research, committee meetings, and needs and task analysis; organizing information into functional groupings; and interpreting data.

**6.3.3** Design programs or curriculums, given needs analysis and agency goals, so that the agency goals are supported, the knowledge and skills are job related, the design is performance based, adult learning principles are utilized, and the program meets time and budget constraints.

**(A) Requisite Knowledge.** Instructional design, adult learning principles, principles of performance-based education, research, and fire service terminology.

**(B) Requisite Skills.** Technical writing, selecting course reference materials.

**6.3.4** Modify an existing curriculum, given the curriculum, audience characteristics, learning objectives, instructional resources, and agency training requirements, so that the curriculum meets the requirements of the agency, and the learning objectives are achieved.

**(A) Requisite Knowledge.** Instructional design, adult learning principles, principles of performance-based education, research, and fire service terminology.

**(B) Requisite Skills.** Technical writing, selecting course reference materials.

**6.3.5** Write program and course goals, given job performance requirements (JPRs) and needs analysis information, so that the goals are clear, concise, measurable, and correlate to agency goals.

**(A) Requisite Knowledge.** Components and characteristics of goals, and correlation of JPRs to program and course goals.

**(B) Requisite Skills.** Writing goal statements.

**6.3.6** Write course objectives, given JPRs, so that objectives are clear, concise, measurable, and reflect specific tasks.

**(A) Requisite Knowledge.** Components of objectives and correlation between JPRs and objectives.

**(B) Requisite Skills.** Writing course objectives and correlating them to JPRs.

**6.3.7** Construct a course content outline, given course objectives, reference sources, functional groupings and the agency structure, so that the content supports the agency structure and reflects current acceptable practices.

**(A) Requisite Knowledge.** Correlation between course goals, course outline, objectives, JPRs, instructor lesson plans, and instructional methods.

**(B) Requisite Skills.** None required.

**6.4 Instructional Delivery.** No JPRs at the Instructor III Level.

### 6.5 Evaluation and Testing.

**6.5.1 Definition of Duty.** Develops an evaluation plan; collects, analyzes, and reports data; and utilizes data for program validation and student feedback.

**6.5.2** Develop a system for the acquisition, storage, and dissemination of evaluation results, given agency goals and policies, so that the goals are supported and those impacted by the information receive feedback consistent with agency policies, federal, state, and local laws.

**(A) Requisite Knowledge.** Record-keeping systems, agency goals, data acquisition techniques, applicable laws, and methods of providing feedback.

**(B) Requisite Skills.** The evaluation, development, and use of information systems.

**6.5.3** Develop course evaluation plan, given course objectives and agency policies, so that objectives are measured and agency policies are followed.

**(A) Requisite Knowledge.** Evaluation techniques, agency constraints, and resources.

**(B) Requisite Skills.** Decision making.

**6.5.4** Create a program evaluation plan, given agency policies and procedures, so that instructors, course components, and facilities are evaluated and student input is obtained for course improvement.

**(A) Requisite Knowledge.** Evaluation methods, agency goals.

**(B) Requisite Skills.** Construction of evaluation instruments.

## Annex A Explanatory Material

*Annex A is not a part of the requirements of this NFPA document but is included for informational purposes only. This annex contains explanatory material, numbered to correspond with the applicable text paragraphs.*

**A.1.3** The specialized and hazardous nature of fire service requires that applicants become qualified in their area of specialty. The committee recognizes it is important that fire service instructors be competent in that area of specialty. The fire service instructors should also possess the physical abilities necessary to conduct instruction in the specialty area. It is not within the scope of this committee, nor is it their intent, to define minimum levels of specific subject matters, knowledge, or proficiency required by instructors. These minimum levels should be determined by the authority having jurisdiction. *(See Annex B for information regarding the management of training programs.)*

**Education.** In developing the fire service instructor standards, the committee identified certain objectives that it found necessary to qualify fire service instructors at the three levels of progression. It was not the intent of the committee to establish standardized instructor training programs, but to utilize programs already in existence throughout the country. The knowledge and skills required to perform the stated objectives can be obtained from various sources such as state fire service training agencies, vocational-technical institutions,

community colleges, universities, self-study, experience, and other educational mediums.

The committee realizes that some instructor candidates might qualify at the various levels without formal training, and although formal training is not a prerequisite, it is strongly recommended that every fire service instructor successfully complete approved formal courses of instruction and attend periodic career development and improvement courses, and remain active within a fire service training program.

**A.1.3.3** This standard does not identify the level of skill and knowledge of the fire service instructor in the subject matter to be taught.

**A.1.3.5** Fire service training can be affected by various organizational, local, state, provincial, or federal laws and regulations, and fire service professional standards. These laws, regulations, and standards include, but are not limited to, issues such as:

- (1) Health and safety
- (2) Human resource policies
- (3) Environment
- (4) Equipment
- (5) Personal safety equipment
- (6) Live fire training
- (7) Training facilities
- (8) Copyright laws
- (9) Laws or regulations pertaining to the release of student and training records

**A.1.3.6** It is recommended, where practical, that evaluators be individuals who were not directly involved as instructors for the requirement being evaluated.

**A.3.1** Action verbs used in the job performance requirements in this document are based on the first definition of the verb found in *Webster's Third New International Dictionary of the English Language*.

**A.3.2.1 Approved.** The National Fire Protection Association does not approve, inspect, or certify any installations, procedures, equipment, or materials; nor does it approve or evaluate testing laboratories. In determining the acceptability of installations, procedures, equipment, or materials, the authority having jurisdiction may base acceptance on compliance with NFPA or other appropriate standards. In the absence of such standards, said authority may require evidence of proper installation, procedure, or use. The authority having jurisdiction may also refer to the listings or labeling practices of an organization that is concerned with product evaluations and is thus in a position to determine compliance with appropriate standards for the current production of listed items.

**A.3.2.2 Authority Having Jurisdiction (AHJ).** The phrase “authority having jurisdiction,” or its acronym AHJ, is used in NFPA documents in a broad manner, since jurisdictions and approval agencies vary, as do their responsibilities. Where public safety is primary, the authority having jurisdiction may be a federal, state, local, or other regional department or individual such as a fire chief; fire marshal; chief of a fire prevention bureau, labor department, or health department; building official; electrical inspector; or others having statutory authority. For insurance purposes, an insurance inspection department, rating bureau, or other insurance company representative may be the authority having jurisdiction. In many circumstances, the property owner or his or her designated agent assumes the role of the authority having jurisdiction; at government installations, the command-

ing officer or departmental official may be the authority having jurisdiction.

**A.4.3.1** The Instructor I should not alter the content or the lesson objectives in this process.

**A.4.3.2** The Instructor I prior to the start of the course should be able to evaluate local conditions, evaluate facilities for appropriateness, meet local standard operating procedures (SOPs) and evaluate limitations of students.

**A.4.3.3** The Instructor I should be able to modify the method of instruction and course materials to meet the needs of the student and accommodate the instructor's style. This includes adaptations necessary due to the learning environment, audience, capability of facilities, and types of equipment.

**A.4.3.3(A)** Presentation methods for the Instructor I include the following:

- (1) Demonstration
- (2) Illustration
- (3) Lecture
- (4) Individualized instruction

A lesson plan should include the following components:

- (1) Job title or topic
- (2) Level of instruction
- (3) Behavioral objectives, performance objectives, or learning outcomes
- (4) Instructional materials needed
- (5) References
- (6) Preparation step (motivation)
- (7) Presentation step
- (8) Application step
- (9) Lesson summary
- (10) Evaluation step
- (11) Assignment

The elements of the communication process include the following:

- (1) Encoding
- (2) Transmitting
- (3) Receiving
- (4) Decoding

**A.4.4.4** The Instructor I should be able to adjust to such changing circumstances as the following:

- (1) Equipment failure
- (2) Weather
- (3) Audio and visual distractions
- (4) Safety
- (5) Limited resources
- (6) Presentation location

The Instructor I should not alter the content or the lesson objectives in this process.

**A.4.4.5(A)** Factors that could influence the learning process include the following:

- (1) Attitude
- (2) Experience
- (3) Knowledge
- (4) Education
- (5) Personality
- (6) Physical condition (fatigue, illness, etc.)
- (7) Unsafe behavior
- (8) Motivation
- (9) Competing demands for time

**A.4.5.1** This duty primarily deals with student evaluation; however, the Instructor I could be required to conduct program evaluations according to policies and procedures.

**A.4.5.5** The Instructor I is expected to be able to assess student test results and identify areas requiring additional study and communicate this information to the student.

**A.5.4.2(B)** The Instructor II should acquire skills to effectively utilize problem-solving techniques, to facilitate and lead conferences, and to use discussion methods of presentation. These techniques are frequently used to conduct small group sessions where participants have advanced knowledge and experience in the subject matter and the goal is to reach a group solution to a problem or issue.

**A.5.4.3** Examples of increased hazard exposure training include live fire exercises, hazardous materials, above and below graded rescue, and evolutions that involve the use of power tools. See Annex C of NFPA 1403, *Standard on Live Fire Training Evolutions*, for information regarding the responsibilities of personnel involved in live fire training evolutions.

**A.6.2.2** See NFPA 1401, *Recommended Practice for Fire Service Training Reports and Records*.

## Annex B Management of Training Programs

*This annex is not a part of the requirements of this NFPA document but is included for informational purposes only.*

**B.1** The training manager can be either a uniformed officer or a civilian. The manager should have experience in fire service training, a clear understanding of the fire department culture, structure, operations and mission, adult learning principles, course development, instructional methods, and evaluation of training. This individual should also be an effective leader and manager who can determine the training needs of the organization, develop goals and objectives to achieve those needs, implement training programs, evaluate the effectiveness of training, and develop the resources needed to sustain an effective and efficient training program.

**B.2** The management of fire service training programs requires a manager, regardless of fire service affiliation or level of instructor certification, who is able to accomplish the following tasks:

- (1) Budgeting
- (2) Resource management
- (3) Management of personnel
- (4) Management of instruction
- (5) Program evaluation
- (6) Training needs analysis
- (7) Scheduling
- (8) Goal setting
- (9) Networking with other training agencies
- (10) Technical writing
- (11) Effective verbal and written communication

## Annex C Explanation of the Standard and Concepts of JPRs

*This annex is not a part of the requirements of this NFPA document but is included for informational purposes only.*

**C.1 Explanation of the Standards and Concepts of Job Performance Requirements (JPRs).** The primary benefit of establishing national professional qualification standards is to provide both public and private sectors with a framework of the job requirements for the fire service. Other benefits include enhancement of the profession, individual as well as organizational growth and development, and standardization of practices.

NFPA professional qualifications standards identify the minimum JPRs for specific fire service positions. The standards can be used for training design and evaluation, certification, measuring and critiquing on-the-job performance, defining hiring practices, and setting organizational policies, procedures, and goals. (Other applications are encouraged.)

Professional qualifications standards for a specific job are organized by major areas of responsibility defined as duties. For example, the fire fighter's duties might include fire suppression, rescue, and water supply, and the public fire educator's duties might include education, planning and development, and administration. Duties are major functional areas of responsibility within a job.

The professional qualifications standards are written as job performance requirements (JPRs). JPRs describe the performance required for a specific job. JPRs are grouped according to the duties of a job. The complete list of JPRs for each duty defines what an individual should be able to do in order to successfully perform that duty. Together, the duties and their JPRs define the job parameters; that is, the professional qualification standard as a whole is a description of a job.

**C.2 Breaking Down the Components of a Job Performance Requirement.** The JPR is the assembly of three critical components. See Table C.2. These components are as follows:

- (1) The task to be performed
- (2) Tools, equipment, or materials that should be provided to successfully complete the task
- (3) Evaluation parameters and/or performance outcomes

**Table C.2 Example of a JPR**

(1) Task	(1) Ventilate a pitched roof.
(2) Tools, equipment, or materials	(2) Given an ax, a pike pole, an extension ladder, and a roof ladder.
(3) Evaluation parameters and/or performance outcomes	(3) So that a 1.22-m × 1.22-m (4-ft × 4-ft) hole is created, all ventilation barriers are removed; ladders are properly positioned for ventilation; ventilation holes are correctly placed; and smoke, heat, and combustion by-products are released from the structure.

*The Task to Be Performed.* The first component is a concise, brief statement of what the person is supposed to do.

*Tools, Equipment, or Materials That Should Be Provided to Successfully Complete the Task.* This component ensures that all individuals completing the task are given the same minimal tools, equipment, or materials when being evaluated. By listing these items, the performer and evaluator know what should be provided in order to complete the task.

*Evaluation Parameters and/or Performance Outcomes.* This component defines how well one should perform each task — for both the performer and evaluator. The JPR guides performance towards successful completion by identifying evaluation parameters and performance outcomes. This portion of the JPR promotes consistency in evaluation by reducing the variables used to gauge performance.

In addition to these three components, the JPRs contain requisite knowledge and skills. Just as the term *requisite* suggests, these are the necessary knowledge and skills one must have prior to being able to perform the task. Requisite knowledge and skills are the foundation for task performance.

Once the components and requisites are put together, the JPR might read as follows:

**C.2.1 Example 1.** Ventilate a pitched roof, given an ax, a pike pole, an extension ladder, and a roof ladder, so that a 1.22-m × 1.22-m (4-ft × 4-ft) hole is created; all ventilation barriers are removed; ladders are properly positioned for ventilation; and ventilation holes are correctly placed.

(A) *Requisite Knowledge:* Pitched roof construction; safety considerations with roof ventilation; the dangers associated with improper ventilation; knowledge of ventilation tools; the effects of ventilation on fire growth; smoke movement in structures; signs of backdraft; and the knowledge of vertical and forced ventilation.

(B) *Requisite Skills:* The ability to remove roof covering; properly initiate roof cuts; use the pike pole to clear ventilation barriers; use the ax properly for sounding, cutting, and stripping; position ladders; and climb and position self on ladder.

**C.2.2 Example 2.** Interpret burn patterns, given standard equipment and tools and some structural/content remains, so that each individual pattern is evaluated with respect to the burning characteristics of the material involved.

(A) *Requisite Knowledge:* Fire development and the interrelationship of heat release rate, form, and ignitability of materials.

(B) *Requisite Skill:* The ability to interpret the effects of burning characteristics on different types of materials.

**C.3 Examples of Potential Uses.** *Certification.* JPRs can be used to establish the evaluation criteria for certification at a specific job level. When used for certification, evaluation must be based on the successful completion of JPRs.

First, the evaluator would verify the attainment of requisite knowledge and skills prior to JPR evaluation. Verification might be through documentation review or testing.

Next, the candidate would then be evaluated on completing the JPRs. The candidate would perform the task and be evaluated based on the evaluation parameters, performance outcomes, or both. This performance-based evaluation can be either practical (for psychomotor skills such as “ventilate a roof”) or written (for cognitive skills such as “interpret burn patterns”).

Note that psychomotor skills are those physical skills that can be demonstrated or observed. Cognitive skills (or mental skills) cannot be observed, but are evaluated on how one completes the task (process oriented) or the task outcome (product oriented).

Using Example 1 in C.2.1, a practical performance-based evaluation would measure the ability to “ventilate a pitched roof.” The candidate passes this particular evaluation if the standard was met, that is, a 1.22-m × 1.22-m (4-ft × 4-ft) hole

was created; all ventilation barriers were removed; ladders were properly positioned for ventilation; ventilation holes were correctly placed; and smoke, heat, and combustion by-products were released from the structure.

For Example 2 in C.2.2, when evaluating the task “interpret burn patterns,” the candidate might be given a written assessment in the form of a scenario, photographs, and drawings and then be asked to respond to specific written questions related to the JPR’s evaluation parameters.

It is important to remember that when a candidate is being evaluated, he or she must be given the tools, equipment, or materials listed in the JPRs before he or she can be properly evaluated.

#### **C.4 Curriculum Development/Training Design and Evaluation.**

The statements contained in this document that refer to job performance were designed and written as JPRs. Although a resemblance to instructional objectives might be present, these statements should not be used in a teaching situation until after they have been modified for instructional use.

JPRs state the behaviors required to perform specific skill(s) on the job, as opposed to a learning situation. These statements should be converted into instructional objectives with behaviors, conditions, and standards that can be measured within the teaching/learning environment. A JPR that requires a fire fighter to “ventilate a pitched roof” should be converted into a measurable instructional objective for use when teaching the skill. [See Figure C.4(a).]

Using Example 1 in C.2.1, a terminal instructional objective might read as follows:

The learner will ventilate a pitched roof, given a simulated roof, an ax, a pike pole, an extension ladder, and a roof ladder, so that 100 percent accuracy is attained on a skills checklist. (At a minimum, the skills checklist should include each of the measurement criteria from the JPR.)

Figure C.4(b) is a sample checklist for use in evaluating this objective.

Although the differences between JPRs and instructional objectives are subtle in appearance, the purpose of each statement differs greatly. JPRs state what is necessary to perform the job in the “real world.” Instructional objectives, however, are used to identify what students must do at the end of a training session and are stated in behavioral terms that are measurable in the training environment.

By converting JPRs into instructional objectives, instructors will be able to clarify performance expectations and avoid confusion related to using statements designed for purposes other than teaching. Additionally, instructors will be able to add local/state/regional elements of performance into the standards as intended by the developers.

Requisite skills and knowledge should be converted into enabling objectives. These help to define the course content. The course content should include each of the requisite knowledge and skills. Using Figure C.4(b), the enabling objectives are pitched roof construction, safety considerations with roof ventilation, removal of roof covering, proper initiation of roof cuts, and so forth. These enabling objectives ensure that the course content supports the terminal objective.

Note that it is assumed that the reader is familiar with curriculum development or training design and evaluation.

**C.5 Other Uses.** While the professional qualifications standards are principally used to guide the development of training and certification programs, there are a number of other potential uses for the documents. Because they are written in