NFPA 1041 Standard for Fire Service Instructor Professional Qualifications

1996 Edition



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NFPA 1041

Standard for

Fire Service Instructor Professional Qualifications

1996 Edition

This edition of NFPA 1041, Standard for Fire Service Instructor Professional Qualifications, was prepared by the Technical Committee on Professional Qualifications, released by the Technical Correlating Committee on Fire Service Instructor Professional Qualifications, and acted on by the National Fire Protection Association, Inc., at its Annual Meeting held May 20-23, 1996, in Boston, MA. It was issued by the Standards Council on July 18, 1996, with an effective date of August 9, 1996, and supersedes all previous editions.

This edition of NFPA 1041 was approved as an American National Standard on July 26, 1996.

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.

This 1996 edition of the standard has been revised based on a complete job task analysis for the position of fire service instructor. The document has been 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.

Technical Correlating Committee on Professional Qualifications

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Rep. Nat'l Volunteer Fire Council

Louis J. Amabili, DE State Fire School, DE

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John P. Wolf, University of Kansas, KS

Rep. T/C on Accreditation and Certification

(Vote limited to Professional Qualifications System Management)

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.

Technical Committee on Fire Service Instructor Professional Qualifications

Gerald Monigold, Chair IL Fire Service Inst., IL

Timothy L. Bradley, NC Fire Commission, NC

Kenneth Hoover, Little Dixie Fire Protection District, MO

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Jack A. Treasure, Gulfport Fire Dept., MS

A. William Westhoff, Jr., OK State University, OK

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NFPA Staff Liaison, (vacant)

Committee Scope: This Committee shall have primary responsibility for documents on professional competence required of fire service instructors.

These lists represent the membership at the time each Committee was balloted on the text of this edition. Since that time, changes in the membership may have occurred. A key to classifications is found at the front of the book.

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.

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Standard for

Fire Service Instructor Professional Qualifications

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

Information on referenced publications can be found in Appendix 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, i.e., 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.

1-4* Definitions.

Approved.* Acceptable to the authority having jurisdiction.

Authority Having Jurisdiction.* The organization, office, or individual responsible for approving equipment, an installation, or a procedure.

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

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.

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.

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.

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.

Shall. Indicates a mandatory requirement.

Task. A specific job behavior or activity.

Chapter 2 Instructor I

2-1 General.

2-1.1 For certification at Fire Instructor Level I, the candidate shall meet the job performance requirements defined in Sections 2-2 through 2-5 of this standard.

2-2 Program Management.

- **2-2.1 Definition of Duty.** The management of basic resources and the records and reports essential to the instructional process.
- **2-2.2** Assemble course materials, given a specific topic, so that the lesson plan, all materials, resources, and equipment needed to deliver the lesson are obtained.
- **2-2.2.1** *Prerequisite Knowledge:* Components of a lesson plan; policies and procedures for the procurement of materials and equipment and resource availability.
- **2-2.3** 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.
- **2-2.3.1** *Prerequisite Knowledge:* Types of records and reports required; policies and procedures for processing records and reports.
- 2-2.3.2 Prerequisite Skills: Basic report writing.

2-3 Instructional Development.

- **2-3.1* Definition of Duty.** The review and adaptation of prepared instructional materials.
- **2-3.2*** 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.
- **2-3.2.1** *Prerequisite Knowledge:* Recognition of student limitations, methods of instruction, types of resource materials; organizing the learning environment; policies and procedures.
- **2-3.2.2** *Prerequisite Skills:* Analysis of resources, facilities, and materials.
- **2-3.3*** 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.
- **2-3.3.1** *Prerequisite Knowledge:* Elements of a lesson plan, selection of instructional aids and methods, origination of learning environment.
- **2-3.3.2** *Prerequisite Skills:* Instructor preparation and organizational skills.

2-4 Instructional Delivery.

- **2-4.1 Definition of Duty.** The delivery of instructional sessions utilizing prepared course materials.
- **2-4.2** 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.
- **2-4.2.1** *Prerequisite Knowledge:* Classroom management and safety, advantages and limitations of audiovisual equipment and teaching aids, classroom arrangement, and methods and techniques of instruction.
- **2-4.2.2** *Prerequisite Skills:* Use of instructional media and materials
- **2-4.3** 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.
- **2-4.3.1*** *Prerequisite 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.
- **2-4.3.2** *Prerequisite Skills:* Oral communication techniques, teaching methods and techniques, utilization of lesson plans in the instructional setting
- **2-4.4*** 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.
- **2-4.4.1** *Prerequisite Knowledge:* Methods of dealing with changing circumstances.
- **2-4.5** 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.

- **2-4.5.1*** *Prerequisite Knowledge:* Motivation techniques, learning styles, types of learning disabilities and methods for dealing with them, methods of dealing with disruptive and unsafe behavior.
- **2-4.5.2** *Prerequisite Skills:* Basic coaching and motivational techniques, adaptation of lesson plans or materials to specific instructional situations.
- **2-4.6** Operate audiovisual equipment, and demonstration devices, given a learning environment and equipment, so that the equipment functions properly.
- **2-4.6.1** Prerequisite Knowledge: Components of audiovisual equipment.
- **2-4.6.2** *Prerequisite Skills:* Use of audiovisual equipment, cleaning, and field level maintenance.
- **2-4.7** 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 is returned to storage.
- **2-4.7.1** Prerequisite Knowledge: Media types, limitations, and selection criteria.
- **2-4.7.2** Prerequisite Skills: Transition techniques within and between media.

2-5 Evaluation and Testing.

- **2-5.1* Definition of Duty.** The administration and grading of student evaluation instruments.
- **2-5.2** 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.
- **2-5.2.1** *Prerequisite Knowledge:* Test administration, agency policies, laws affecting records and disclosure of training information, purposes of evaluation and testing, and performance skills evaluation.
- **2-5.2.2** *Prerequisite Skills:* Use of skills checklists and oral questioning techniques.
- **2-5.3** 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.
- **2-5.3.1** *Prerequisite Knowledge:* Grading and maintaining confidentiality of scores.
- **2-5.4** 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.
- **2-5.4.1** *Prerequisite Knowledge:* Reporting procedures, the interpretation of test results.
- **2-5.4.2** Prerequisite Skills: Communication skills, basic coaching.
- **2-5.5*** Provide evaluation feedback to students, given evaluation data, so that the feedback is timely, specific enough for

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the student to make efforts to modify behavior, objective, clear, and relevant; include suggestions based on the data.

- **2-5.5.1** *Prerequisite Knowledge:* Reporting procedures, the interpretation of test results.
- **2-5.5.2** Prerequisite Skills: Communication skills, basic coaching.

Chapter 3 Instructor II

3-1 General. For certification at Level II, the Fire Instructor I shall meet the job performance requirements defined in Sections 3-2 through 3-5 of this standard.

3-2 Program Management.

- **3-2.1 Definition of Duty.** The management of instructional resources, staff, facilities and records, and reports.
- **3-2.2** 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.
- **3-2.2.1** *Prerequisite Knowledge:* Departmental policy, scheduling processes, supervision techniques, and resource management.
- **3-2.3** 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.
- **3-2.3.1** *Prerequisite Knowledge:* Agency budget policy, resource management, needs analysis, sources of instructional materials, and equipment.
- **3-2.3.2** *Prerequisite Skills:* Resource analysis and forms completion.
- **3-2.4** Acquire training resources, given an identified need, so that the resources are obtained within established timelines, budget constraints, and according to agency policy.
- **3-2.4.1** *Prerequisite Knowledge:* Agency policies, purchasing procedures, budget management.
- **3-2.4.2** *Prerequisite Skills:* Forms completion.
- **3-2.5** Coordinate training record keeping, given training forms, department policy, and training activity, so that all agency and legal requirements are met.
- **3-2.5.1** *Prerequisite 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.
- **3-2.5.2** *Prerequisite Skills:* Record auditing procedures.
- **3-2.6** 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.
- **3-2.6.1** *Prerequisite Knowledge:* Personnel evaluation methods, supervision techniques, department policy, effective instructional methods and techniques.
- **3-2.6.2** *Prerequisite Skills:* Coaching, observation techniques, completion of evaluation forms.

3-3 Instructional Development.

- **3-3.1 Definition of Duty.** The development of instructional materials for specific topics.
- **3-3.2** 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.
- **3-3.2.1** *Prerequisite 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.
- **3-3.2.2** *Prerequisite 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.
- **3-3.3** 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.
- **3-3.3.1** *Prerequisite 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.
- **3-3.3.2** Prerequisite 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.

3-4 Instructional Delivery.

- **3-4.1 Definition of Duty.** Conducting specialized and advanced classes using a lesson plan.
- **3-4.2** 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.
- **3-4.2.1** *Prerequisite Knowledge:* Use and limitations of teaching methods and techniques.
- **3-4.2.2*** *Prerequisite Skills:* Transition between different teaching methods, conference, and discussion leadership.
- **3-4.3*** Supervise other instructors and students during high hazard training, given a training scenario with increased hazard exposure, so that applicable safety standards and practices are followed, and instructional goals are met.
- **3-4.3.1** *Prerequisite Knowledge:* Safety rules, regulations and practices, the incident command system used by the agency, and leadership techniques.
- **3-4.3.2** *Prerequisite Skills:* ICS implementation.

3-5 Evaluation and Testing.

3-5.1 Definition of Duty. The development of student evaluation instruments to support instruction and the evaluation of test results.

- **3-5.2** 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.
- **3-5.2.1** *Prerequisite Knowledge:* Evaluation methods, development of forms, effective instructional methods, and techniques.
- **3-5.2.2** *Prerequisite Skills:* Evaluation item construction and assembly of evaluation instruments.
- **3-5.3** 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.
- **3-5.3.1** *Prerequisite Knowledge:* Evaluation methods, test validity.
- 3-5.3.2 Prerequisite Skills: Development of evaluation forms.
- **3-5.4** Analyze student evaluation instruments, given test data, objectives and agency policies, so that validity is determined and necessary changes are accomplished.
- **3-5.4.1** *Prerequisite Knowledge:* Test validity, reliability, and item analysis.
- **3-5.4.2** *Prerequisite Skills:* Item analysis techniques.

Chapter 4 Instructor III

4-1 General. For certification at Level III, the Fire Instructor II shall meet the job performance requirements defined in Sections 4-2 through 4-5 of this standard.

4-2 Program Management.

- **4-2.1 Definition of Duty.** The administration of agency policies and procedures for the management of instructional resources, staff, facilities, records, and reports.
- **4-2.2** 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.
- **4-2.2.1** *Prerequisite Knowledge:* Agency policy, record keeping systems, professional standards addressing training records, legal requirements affecting record keeping, and disclosure of information.
- **4-2.2.2** *Prerequisite Skills:* Development of forms, report generation.
- **4-2.3** 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.
- **4-2.3.1** *Prerequisite Knowledge:* Agency procedures and training program goals, format for agency policies.
- **4-2.3.2** *Prerequisite Skills:* Technical writing.
- **4-2.4** Select instructional staff, given personnel qualifications, instructional requirements, and agency policies and proce-

- dures, so that staff selection meets agency policies and achievement of agency and instructional goals.
- **4-2.4.1** *Prerequisite Knowledge:* Agency polices regarding staff selection, instructional requirements, selection methods, the capabilities of instructional staff and agency goals.
- 4-2.4.2 Prerequisite Skills: Evaluation techniques.
- **4-2.5** 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.
- **4-2.5.1** *Prerequisite Knowledge:* Evaluation methods, agency policies, staff schedules, and job requirements.
- **4-2.6** Write equipment purchasing specifications, given curriculum information, training goals, and agency guidelines, so that the equipment is appropriate and supports the curriculum.
- **4-2.6.1** *Prerequisite Knowledge:* Equipment purchasing procedures, available department resources and curriculum needs.
- **4-2.6.2** *Prerequisite Skills:* Evaluation methods to select the equipment that is most effective and preparation of procurement forms.
- **4-2.7** 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.
- **4-2.7.1** *Prerequisite Knowledge:* Statistical evaluation procedures and agency goals.
- **4-2.7.2** *Prerequisite Skills:* Presentation skills and report preparation following agency guidelines.

4-3 Instructional Development.

- **4-3.1 Definition of Duty.** Plans, develops, and implements comprehensive programs and curriculum.
- **4-3.2** Conduct an agency needs analysis, given agency goals, so that instructional needs are identified.
- **4-3.2.1** Prerequisite 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.
- **4-3.2.2** *Prerequisite Skills:* Conducting research, committee meetings, and needs and task analysis; organizing information into functional groupings; and interpreting data.
- **4-3.3** 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.
- **4-3.3.1** *Prerequisite Knowledge:* Instructional design, adult learning principles, principles of performance based education, research, and fire service terminology.
- **4-3.3.2** *Prerequisite Skills:* Technical writing, selecting course reference materials.
- **4-3.4** Modify an existing curriculum, given the curriculum, audience characteristics, learning objectives, instructional resources and agency training requirements, so that the cur-

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riculum meets the requirements of the agency, and the learning objectives are achieved.

- **4-3.4.1** *Prerequisite Knowledge*: Instructional design, adult learning principles, principles of performance based education, research, and fire service terminology.
- **4-3.4.2** *Prerequisite Skills*: Technical writing, selecting course reference materials.
- **4-3.5** 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.
- **4-3.5.1** *Prerequisite Knowledge:* Components and characteristics of goals, and correlation of JPRs to program and course goals.
- **4-3.5.2** *Prerequisite Skills:* Writing goal statements.
- **4-3.6** Write course objectives, given JPRs, so that objectives are clear, concise, measurable, and reflect specific tasks.
- **4-3.6.1** *Prerequisite Knowledge:* Components of objectives and correlation between JPRs and objectives.
- **4-3.6.2** *Prerequisite Skills:* Writing course objectives and correlating them to JPRs.
- **4-3.7** 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.
- **4-3.7.1** *Prerequisite Knowledge*: Correlation between course goals, course outline, objectives, JPRs, instructor lesson plans, and instructional methods.
- **4-4 Instructional Delivery.** No Job Performance Requirements at the Instructor III Level.

4-5 Evaluation and Testing.

- **4-5.1 Definition of Duty.** Develops an evaluation plan, collects, analyses and reports data and utilizes data for program validation and student feedback.
- **4-5.2** 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.
- **4-5.2.1** *Prerequisite Knowledge:* Record keeping systems, agency goals, data acquisition techniques, applicable laws, and methods of providing feedback.
- **4-5.2.2** *Prerequisite Skills:* The evaluation, development, and use of information systems.
- **4-5.3** Develop course evaluation plan, given course objectives and agency policies, so that objectives are measured and agency policies are followed.
- **4-5.3.1** *Prerequisite Knowledge:* Evaluation techniques, agency constraints, and resources.
- 4-5.3.2 Prerequisite Skills: Decision-making.
- **4-5.4** 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.

4-5.4.1 *Prerequisite Knowledge:* Evaluation methods, agency goals.

4-5.4.2 *Prerequisite Skills:* Construction of evaluation instruments.

Appendix A Explanatory Material

This appendix is not a part of the recommendations of this NFPA document but is included for informational purposes only.

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 Appendix B of this standard 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:
 - (a) Health and safety;
 - (b) Human resource policies;
 - (c) Environmental;
 - (d) Equipment;
 - (e) Personal safety equipment;
 - (f) Live fire training;
 - (g) Training facilities.
 - (h) Copyright laws;
- (i) 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-1-4** 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-1-4 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 concerned with product evaluations that is in a position to determine compliance with appropriate standards for the current production of listed items.
- A-1-4 Authority Having Jurisdiction. The phrase "authority having jurisdiction" 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 commanding officer or departmental official may be the authority having jurisdiction.
- **A-2-3.1** The Instructor I should not alter the content or the lesson objectives in this process.
- **A-2-3.2** 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 limitations of students.
- **A-2-3.3** 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. The student should, however, achieve the lesson objectives.
- A-2-4.3.1 Presentation methods for the Instructor I include:
 - (a) Demonstration;
 - (b) Illustration;
 - (c) Lecture;
 - (d) Individualized instruction.

A lesson plan should include the following components:

- (a) Job title or topic;
- (b) Level of instruction;
- (c) Behavioral objectives, performance objectives, or learning outcomes;

- (d) Instructional materials needed;
- (e) References;
- (f) Preparation step (motivation);
- (g) Presentation step;
- (h) Application step;
- (i) Lesson summary;
- (j) Evaluation step;
- (k) Assignment.

The elements of the communication process include:

- (a) Encoding;
- (b) Transmitting;
- (c) Receiving:
- (d) Decoding.
- **A-2-4.4** The Instructor I should be able to adjust to such changing circumstances as:
 - (a) Equipment failure;
 - (b) Weather;
 - (c) Audio and visual distractions;
 - (d) Safety;
 - (e) Limited resources;
 - (f) Presentation location.

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

- **A-2-4.5.1** Factors that could influence the learning process include:
 - (a) Attitude;
 - (b) Experience;
 - (c) Knowledge;
 - (d) Education;
 - (e) Personality;
 - (f) Physical condition (fatigue, illness, etc.);
 - (g) Unsafe behavior;
 - (h) Motivation;
 - (i) Competing demands for time.
- **A-2-5.1** This duty primarily deals with student evaluation; however, the Instructor I could be required to conduct program evaluations according to policies and procedures.
- **A-2-5.5** 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-3-4.2.2** 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-3-4.3** Examples of high hazard training include live fire exercises, hazardous materials, above and below graded rescue, and evolutions that involve the use of power tools. See Appendix C of NFPA 1403, *Standard on Live Fire Training Evolutions in Structures*, for information regarding the responsibilities of personnel involved in live fire training evolutions.

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Appendix B Management of Training Programs

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

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.

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:

- (a) Budgeting;
- (b) Resource management;
- (c) Management of personnel;
- (d) Management of instruction;
- (e) Program evaluation;
- (f) Training needs analysis;
- (g) Scheduling;
- (h) Goal setting;
- (i) Networking with other training agencies;
- (j) Technical writing;
- (k) Effective verbal and written communication.

Appendix C Explanation of the Standard and Concepts of JPRs

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

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 job performance requirements 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 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). Job performance requirements 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 standard as a whole is a description of a job.

Breaking Down the Components of a Job Performance Requirement

The job performance requirement is the assembly of three critical components. These components are the:

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

Example:

(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/ (3) So that a 4 ft × 4 ft hole is creor performance outcomes ated, all ventilation barriers are
 - 3) So that a 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. his 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/or 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 JPR contains prerequisite knowledge and skills. Just as the term prerequisite suggests, these are the necessary knowledge and skills one should have prior to being able to perform the task. Prerequisite knowledge and skills are the foundation for task performance.

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

Example 1:

The **Fire Fighter I** shall ventilate a pitched roof, given an ax, a pike pole, an extension ladder, and a roof ladder, so that a 4 ft \times 4 ft hole is created; all ventilation barriers are removed; ladders are properly positioned for ventilation; ventilation holes are correctly placed.

Prerequisite 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.

Prerequisite Skills: Remove roof covering; properly initiate roof cuts; use the pike pole to clear ventilation barriers; use ax properly for: sounding, cutting, and stripping; position ladders; and climb and position self on ladder.

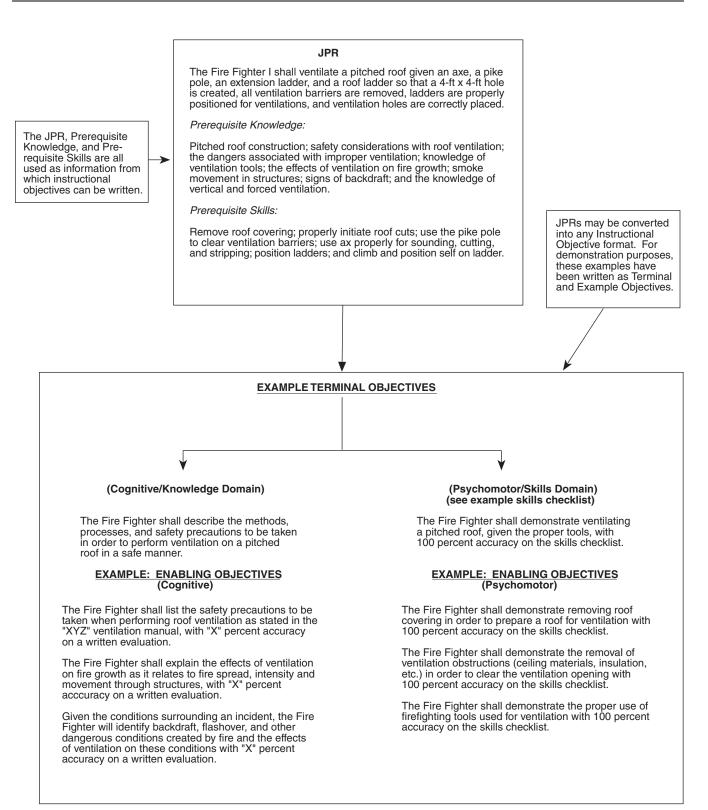


Figure C-1 Converting JPRs into instructional objectives.