1041

FIRE SERVICE INSTRUCTOR PROFESSIONAL QUALIFICATIONS 1981



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National Professional Qualifications System

established by the

Joint Council of National Fire Service Organizations

Constituent Members of the Joint Council of National Fire Service Organizations

Fire Marshals Association of North America
International Association of Arson Investigators
International Association of Black Professional Fire Fighters
International Association of Fire Chiefs
International Association of Fire Fighters
International Fire Service Training Association
International Municipal Signal Association
International Society of Fire Service Instructors
Metropolitan Committee of International Association of Fire Chiefs
National Fire Protection Association
National Volunteer Fire Council

The Joint Council of National Fire Service Organizations consists of leaders of the principal national organizations representing the Fire Service of the United States. It meets periodically to review current developments and to establish areas of common interest where cooperative efforts of member organizations can be used for maximum results.

An important step in the establishment of national standards of professional competence for the fire service was taken by the Joint Council on October 25, 1972.

The Council decided that one area of common interest in which national collective action was desirable was in the establishment of standards upon which the levels of competency within the fire service could be determined.

A committee of the Council was delegated the responsibility of preparing an acceptable system for the development of the standards. Following several months of work, during which the suggestions of constituent organizations were incorporated, the Committee submitted the final proposal to the Joint Council and the following system was approved and established:

- 1. Committees to develop standards of professional competency, made up of peer group representation; and
- 2. An independent Board to oversee and validate standards developed and the implementation of such standards in a nationally coordinated continuing professional development program for the fire service.

The Secretariat for Committees and Board is to be provided by the staff of the National Fire Protection Association.

1. Fire Service Professional Standards Development Committees

There are four committees, each of which is made up of representatives of organizations which are constituent members of the Joint Council and certain other persons nominated by the Joint Council, collectively.

The four committees are respectively responsible for the development and preparation of recommended minimum standards of professional competence required of:

- 1. Fire Fighters
- 2. Fire Inspectors and Investigators
- 3. Fire Service Instructors
- 4. Fire Service Officers.

Each committee is established and operated under NFPA standards making procedures with one important variation, which is that no draft standard shall be submitted to NFPA for final adoption until it has been approved by the National Professional Qualifications Board for the Fire Service.

Standards are prepared for use after final adoption as a basis for nationally standardized examinations by authorized agencies and the standards are available for adoption by federal, state and local authorities.

Committees do not determine, or become involved in, actual certification procedures or the direct implementation of the standards; they do assist implementing agencies by a continuing review and revision of the standards.

The authorized representation on each committee is as follows:

1. Fire Fighter Qualifications Committee

International Association of Fire Chiefs International Association of Fire Fighters	3 3	1
International Association of Black Professional	Ů	porsons
Fire Fighters	3	persons
International Fire Service Training Association	3	persons
International Society of Fire Service Instructors	3	persons
National Fire Protection Association	3	persons
Joint Council of National Fire Service Organizations	3	persons

2. Fire Inspector and Investigator Qualifications Committee

Fire Marshals Association of North America	2	persons
International Association of Arson Investigators	2	persons
International Association of Fire Chiefs	2	persons
International Association of Fire Fighters	2	persons
National Fire Protection Association	2	persons
Joint Council of National Fire Service Organizations	3	persons

3. Fire Service Instructor Qualifications Committee

International Association of Fire Chiefs	2 persons
International Association of Fire Fighters	2 persons
International Fire Service Training Association	2 persons
International Society of Fire Service Instructors	2 persons
National Fire Protection Association	2 persons
Joint Council of National Fire Service Organizations	3 persons

4. Fire Service Officer Qualifications Committee

Fire Marshals Association of North America	3	persons
International Association of Fire Chiefs	3	persons
International Association of Fire Fighters	3	persons
International Association of Black Professional		-
Fire Fighters	3	persons
International Society of Fire Service Instructors	3	persons
Metropolitan Committee of International Association		
of Fire Chiefs	3	persons
National Fire Protection Association	3	persons
Joint Council of National Fire Service Organizations	3	persons

2. National Professional Qualifications Board for the Fire Service

A nine-person Board appointed by the Joint Council to act on behalf of the Council in the following duties and responsibilities:

- (i) The Board is constituted to supervise a nationally coordinated continuing professional development program for the Fire Service.
- (ii) The Board shall be responsive to the needs and opinions of all groups involved with the Fire Service and of others, including individuals who have related interests.
- (iii) It shall identify and define levels of professional progression.
- (iv) It shall correlate, review and validate draft standards prepared by the Technical Committees established to produce professional standards for each level of fire service responsibility.

(v) It shall approve all draft standards before such are submitted for final adoption procedures.

(vi) It shall be responsible for the accreditation and supervision of any national programs of certification and shall coordinate with implementing agencies to ensure validity and reliability of the evaluation criteria used in connection with such programs.

CURRENT COMPOSITION OF THE BOARD

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STATEMENT BY THE BOARD AS TO THE APPLICABILITY OF STANDARDS DEVELOPED UNDER THE SYSTEM

Application to Existing Positions

It is not the intent of the Board that these standards shall have the effect of rendering invalid any rank, qualification and appointment acquired prior to the adoption of this standard.

Upon adoption of any standard, the authority having jurisdiction shall classify its existing ranks, qualifications, and appointments to determine equivalency with an appropriate level of the standard.

An incumbent of a position established prior to adoption of a standard shall be considered qualified and eligible for future progression in accordance with the standards.

Existing Systems

Those existing systems of qualifications which meet or exceed these minimum standards should continue in force.

It is the intent, however, that existing systems of qualifications which fail to meet these standards be discontinued after adoption of the standard, so that all persons acquiring qualification thereafter do so in accordance with this standard.

The Board recognizes that, at present, wide variations exist in the standards of competence required of members of the fire service; and that due to geographic considerations and the differing requirements of the many organizations providing fire protection, higher levels of competence than those provided in the standards produced under the National System may be desirable in certain areas.

The Board considers it essential that all members of the fire service eventually achieve the minimum standards.

Performance Objectives

The Board directed all committees to develop standards in terms of terminal performance objectives, which are considered the *minimum* necessary for a person to be considered competent to engage in providing fire service at the respective level and in the role specified by the standard, no matter where that person is serving.

In this connection, it is pointed out that the statement of performance objectives contained in the standards is not a training program outline. A number of instructional steps are required for mastery of an objective. Teaching outlines will be more detailed and extensive, as a single objective can require many hours of instruction and may interrelate to instruction for other objectives.

The Standards

The standards are designed so that any member of the fire service can achieve the level required by various means; these include participation in state and local training programs, self study, attendance at colleges offering suitable courses, and by combinations of these means.

The standards are the first step: there must also be a controlled testing procedure by which personnel can be officially certified when they have demonstrated their competency. The Board stresses that such testing procedures are essential to a meaningful program of professionalism and, accordingly, is prepared, in conformance with the directions of the Joint Council of National Fire Service Organizations, to review the validity and quality of testing procedures established by state and local authorities, and to accredit such procedures.

The Board strongly recommends that certification procedures be established on a statewide basis in every state where no such system exists at present, and that every fire department participate in the program.

The establishment of standards and testing procedures will not, in themselves, ensure that all personnel will achieve the required levels of competency. It follows that training programs should be developed to prepare members of the fire service to acquire the skills and knowledge necessary to achieve the terminal performance objectives of the standards.

Throughout the standards, levels of numerical ascending sequence have been used to denote the increasing degrees of responsibility: e.g., Fire Fighter I, II, III, the lowest or basic level being I. A similar sequence will be used in each standard; the total number of levels varying in accordance with the number of steps involved in the individual standard.

Approval of Standard

The final draft of NFPA 1041, Fire Service Instructor Professional Qualifications, was approved by the National Professional Qualifications Board for the Fire Service on April 3, 1981, with the recommendation that it be submitted for adoption at the NFPA Annual Meeting to be held in Dallas, Texas in May, 1981.

Fire Service Instructor Professional Qualifications

NFPA 1041

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Standard for

Fire Service Instructor Professional Qualifications

NFPA 1041-1981

1981 Edition of NFPA 1041

This edition of NFPA 1041, Standard for Fire Service Instructor Professional Qualifications, was prepared by the Technical Committee on Fire Service Professional Standards Development for Fire Service Instructor Qualifications and acted on by the National Fire Protection Association, Inc. on May 19, 1981, at its Annual Meeting in Dallas, Texas. It was issued by the Standards Council with an effective date of July 29, 1981.

Origin and Development of NFPA 1041

On December 14, 1972 the National Professional Qualifications Board for the Fire Service directed the chairmen of four technical committees to develop minimum standards for each of the following areas: fire fighter, fire instructor, fire investigator and inspector, and fire officer.

In compliance with this direction the Fire Service Professional Standards Development Committee for Fire Service Instructor Qualifications met in several general sessions and sub-committee 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 which 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.

Committee on Fire Service Professional Standards Development for Fire Service Instructor Qualifications

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Organizations

This list represents the membership at the time the Committee was balloted on the text of this edition. Since that time, changes in the membership may have occurred.

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

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Standard for

Fire Service Instructor

Professional Qualifications

NFPA 1041-1981

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

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.

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

This standard shall cover the entrance requirements, and the requirements for the subsequent four levels of progression, i.e., Fire Service Instructor I, Fire Service Instructor II, Fire Service Instructor IV.

1-3 General.

- 1-3.1 All of the performance standards for any level of fire service instructor shall meet the following criteria: they shall be performed with competence; each objective shall be met in its entirety unless otherwise stated.
- 1-3.2 It is not required that the objectives be mastered in the order that they appear in each of the levels of progression.
- 1-3.3 When accepted, after fulfilling the entrance requirements of Chapter 2 of this standard, the individual may be called a fire service instructor candidate. The fire service instructor shall meet all of the objectives for Fire Service Instructor I before being certified at that level, and before applying for qualification at the next higher level.

- 1-3.4 The Fire Service Instructor I shall meet all of the objectives for Fire Service Instructor II before being certified at that level, and before applying for qualification at the next higher level.
- 1-3.5 The Fire Service Instructor II shall meet all of the objectives for Fire Service Instructor III before being certified at that level, and before applying for qualification at the next higher level.
- 1-3.6 The Fire Service Instructor III shall meet all of the objectives for Fire Service Instructor IV before being certified at that level.
- 1-3.7 This standard does not identify the level of skill and knowledge of the fire service instructor in the subject matter to be taught. Each training agency should select instructors who have appropriate subject matter skill, knowledge, and ability.

1-4* Definitions.

Classify. To place into groups having a common characteristic; to assign to a particular category.

Construct. To draw, to make, to design, to assemble, to prepare, or to build.

Define. To supply a verbal description (orally or in writing) that gives the precise meaning or essential qualities.

Demonstrate. To perform a set of procedures with or without a verbal explanation.

Describe. To supply a verbal account (orally or in writing) that gives the essential categories, properties and relationships.

Distinguish. To identify as separate or different by marking, separating into classes or selecting out a common kind.

Identify. To point out, touch, mark, encircle, match, or pick up.

Instructor Candidate. A person who has made out an application to become a fire service instructor and has fulfilled the entrance requirements in Chapter 2 of this standard, but has not met the objectives for Instructor I.

Instructor I. A fire service instructor who has demonstrated the knowledge of and the ability to conduct instruction from prepared material which is predominately skills-oriented.

Instructor II. A fire service instructor who, in addition to meeting Instructor I qualifications, has demonstrated a knowledge of and an ability to teach formalized training courses, including the necessity to relate sequential material from one lesson or class to the next. Also, the instructor shall have the ability to prepare lesson plans and instructional material.

Instructor III. A fire service instructor who, in addition to meeting Instructor II qualifications, has demonstrated a knowledge of and the ability to develop formalized training courses, tests, evaluations and other associated instructional materials. The instructor shall also be able to utilize personnel management techniques.

Instructor IV. A fire service instructor who administers and manages a training program. This instructor, in addition to meeting Instructor III qualifications, has demonstrated knowledge of management principles which include personnel, program, and financial management.

Name. To supply a verbal label (orally or in writing).

Order. To list in order, to place in sequence, to arrange, or to rearrange.

Performance Objective or Behavioral Objective. A goal that is achieved through the attainment of a skill, or knowledge, or both, which can be observed or measured.

Qualified. Having satisfactorily completed the requirement of the objectives.

Shall. Indicates a mandatory requirement.

Should. Indicates a recommendation or that which is advised but not required.

With Competence. To demonstrate knowledge, skills, and judgment needed to perform indicated objective satisfactorily.

Chapter 2 Entrance Requirements

- 2-1* General. The Fire Service Instructor candidate for Instructor I shall be a qualified Fire Fighter III, as defined in NFPA 1001, Standard for Fire Fighter Professional Qualifications.
- 2-2 Physical Requirements. Instructors at each level of progression shall possess the physical ability to perform all tasks associated with their instruction assignment.

Chapter 3 Instructor I

3-1 General.

- 3-1.1 The objectives of this chapter are based on the ability of the instructor candidate to demonstrate knowledge and skills in the following general subject areas:
 - (a) Communication.
 - (b) Concepts of Learning.
 - (c) Human Relations in the Teaching-Learning Environment.
 - (d) Methods of Teaching.
 - (e) Organizing the Learning Environment.
 - (f) Performance Evaluation.
 - (g) Records and Reports.
 - (h) Testing and Evaluation.
 - (i) The Instructor's Roles and Responsibilities.
 - (j) The Lesson Plan.
 - (k) The Teaching Technique.
 - (l) The Use of Instructional Materials.
- 3-1.2 The instructor candidate shall define the following terms and relate the concepts of these terms to fire service instructional activities:
 - (a) Course objectives.
 - (b) Course outline.
 - (c) Feedback.
 - (d) Four-step method.
 - (e) Instructional materials.
 - (f) Instructor.
 - (g) Job.
 - (h) Job breakdown sheet.
 - (i) Key points.
 - (j) Lesson plan.
 - (k) Level of instruction.
 - (l) Materials needed.

- (m) Methods of instruction.
- (n) Minimum acceptable standard.
- (o) Motivation.
- (p) Occupational analysis.
- (q) Performance levels.
- (r) Progress chart.
- (s) Student.

3-2 The Instructor's Roles and Responsibilities.

- 3-2.1 The instructor candidate shall specifically locate the position of Instructor I within the table of organization, identifying superiors and describing the instructor's role within the organization.
- 3-2.2 The instructor candidate shall describe and classify the instructor's responsibility to each of the following:
 - (a) the fire service
 - (b) the administration
 - (c) the student.
- 3-2.3 The instructor candidate shall describe Equal Opportunity and Affirmative Action programs as they relate to fire service instruction.
- **3-3 Communication.** The instructor candidate shall demonstrate in a teaching situation the ability to speak in an easily understood manner having the following characteristics:
 - (a) A clear, effectively pitched and well-modulated voice.
 - (b) Speech that is reasonably free from language errors.
- (c) A style reasonably free from mannerisms that materially detract from the teaching effort.

3-4 Concepts of Learning.

- 3-4.1 The instructor candidate shall describe how the following student/instructor factors influence the teaching-learning process:
 - (a) attitute
 - (b) experience
 - (c) knowledge
 - (d) education
 - (e) personality
 - (f) physical condition (fatigue, illness, etc.).

- 3-4.2 The instructor candidate shall define the following laws as stated by E.L. Thorndike:
 - (a) The Law of Effect.
 - (b) The Law of Exercise.
 - (c) The Law of Readiness.
- 3-5 Human Factors in the Teaching-Learning Environment. The instructor candidate shall describe at least two means of dealing with each of the following types of students:
 - (a) Daydreamer.
 - (b) Fast learner.
 - (c) Shy or timid student.
 - (d) Sidetracker or staller.
 - (e) Slow learner.
 - (f) Troublemaker or "wise guy."
- 3-6 Instructional Materials. The instructor candidate shall demonstrate the proper use of audio/visual equipment, teaching aids and demonstration devices generally employed in training programs, including, but not limited to, the following:
 - (a) Audio/visual equipment
 - 1. Motion picture film projector.
 - 2. Overhead projector.
 - 3. Portable projection screen.
 - 4. Slide projector.
 - (b) Projectable instructional materials
 - 1. Motion picture film.
 - 2. Slides.
 - 3. Transparencies.
 - (c) Nonprojectable instructional materials
 - Chalkboard.
 - 2. Charts.
 - 3. Diagrams.

3-7 Organizing the Learning Environment.

- 3-7.1 The instructor candidate shall describe how to organize an optimum learning environment in a classroom or other indoor facility with regard to:
 - (a) Adequate lighting.
 - (b) Freedom from distraction.
 - (c) Heating, cooling and ventilation.
 - (d) Noise control.
 - (e) Seating.
 - (f) Use of audio/visual equipment and teaching aids.
- (g) Use of existing classroom facilities such as the chalkboard and bulletin board.
- 3-7.2 The instructor candidate shall describe how to organize an optimum learning environment at drillground or other outdoor facility with regard for:
- (a) Ability for learners to see and hear all of the instructional effort.
 - (b) Audible and visible distractions.
 - (c) Inclement weather.
 - (d) Visual aid limitations.
- 3-8 The Lesson Plan. The instructor candidate shall identify and describe the following components of a lesson plan:
 - (a) Job title or topic.
 - (b) Level of instruction.
 - (c) Behavioral objectives or performance objectives.
 - (d) Instructional materials needed.
 - (e) References.
 - (f) Preparation step (motivation).
 - (g) Presentation step.
 - (h) Application step.
 - (i) Lesson summary.
 - (j) Evaluation step.
 - (k) Assignment.

3-9 The Teaching Technique.

- 3-9.1 The instructor candidate, given the assignment to teach a fire service subject, shall demonstrate ability to effect changes in student behavior by utilizing a lesson plan and a technique that employs the following four steps:
 - (a) Preparation (motivation).
 - (b) Presentation.
 - (c) Application.
 - (d) Testing.
- **3-9.2** Given the following situations, the instructor candidate shall describe how to adjust the presentation to ensure class continuity and student interest:
 - (a) Failure of audio/visual equipment.
 - (b) Failure of students to perform as planned.
 - (c) Inclement weather.
- (d) Interruption of the class by an alarm, an unscheduled work detail, etc.
 - (e) Lack of student interest in the subject.
 - (f) Visitors.

3-10 Testing and Evaluation.

- 3-10.1 The instructor candidate shall describe the value of evaluating self-performance during an instructional activity.
- 3-10.2 The instructor candidate shall demonstrate ability to evaluate student performance to provide feedback regarding possible revisions in lesson plans or materials.
- 3-10.3 The instructor candidate shall demonstrate knowledge of the administration and grading of oral, written, and manipulative performance tests that may be required for student evaluation.
- **3-10.4** The instructor candidate shall describe procedures for reducing student failure rates by the following methods:
 - (a) Bringing about an improved performance.
- (b) Providing individual instruction to improve manipulative skill performance.
 - (c) Tutoring a student to improve technical knowledge.

3-11 Training Records and Reports. The instructor candidate shall identify training record and report forms employed in instructional activities and describe the benefits and purpose of these forms.

Chapter 4 Instructor II

- **4-1 General.** The objectives of this chapter are based on the ability of the instructor to demonstrate knowledge and skills in the following general subject areas:
 - (a) Preparation of Instructional Materials.
 - (b) Techniques of Testing and Evaluation.
 - (c) Writing Behavioral Objectives or Performance Objectives.
- **4-2 Behavioral Objectives or Performance Objectives.** Given general objectives, the instructor shall demonstrate the ability to develop specific, measurable, attainable behavioral objectives or performance objectives that have three major components:
- (a) What behavior is expected what the student will be able to do.
- (b) How the behavior is to be accomplished the conditions under which the performance will be evaluated.
- (c) To what standard the behavior is to be accomplished how well the student will be able to perform.
- 4-3 Lesson Plan Development. Given a fire service subject for which no prepared lesson plan exists, the instructor shall analyze the subject, determine the appropriate objectives for the subject, and develop a comprehensive lesson plan which meets the objectives for that subject and includes the following components:
 - (a) Job title or topic.
 - (b) Level of instruction.
 - (c) Objectives (behavioral or performance).
 - (d) Materials needed.
 - (e) References.
 - (f) Preparation step.
 - (g) Presentation.
 - (h) Application step.
 - (i) Lesson summary.
 - (j) Evaluation step.
 - (k) Assignments.

- 4-4 Instructional Materials Development. The instructor shall prepare the following instructional materials.
 - (a) Projectable instructional materials
 - 1. Overhead transparencies.
 - (b) Nonprojectable instructional materials
 - 1. Charts.
 - 2. Diagrams.
 - (c) Printed materials
 - 1. Information sheets.
 - 2. Student worksheets.
- 4-5 Teaching/Learning Process. The instructor shall describe how the following factors influence the teaching/learning process.
 - (a) Instructional materials
 - 1. Applicability to subject being taught.
 - Type.
 - 3. Quality.
 - (b) The physical environment
 - 1. Indoor facility.
 - Outdoor facility.
- **4-6 Evaluation.** The instructor shall construct written questions, oral questions, and manipulative performance tests based upon the behavioral objectives or performance objectives of the lesson.
- 4-7 Methods of Instruction. The instructor shall explain when each of the following methods should be used and describe the relative values of each method.
 - (a) The conference.
 - (b) The discussion.
 - (c) The demonstration.
 - (d) The illustration.
 - (e) The lecture.
- 4-8 Training Records and Reports. The instructor shall complete training reports and records required.
- **4-9 References.** The instructor shall identify sources where reference materials required for the development of a fire service lesson plan may be obtained.

Chapter 5 Instructor III

- 5-1 General. The objectives of this chapter are based on the ability of the instructor to demonstrate knowledge and skills in the following general subject areas:
 - (a) Analyzing Fire Service Occupations.
 - (b) Preparation of Instructional Materials.
 - (c) Principles of Technical Writing.
 - (d) Techniques of Administering Testing and Evaluation.
 - (e) Writing Behavioral Objectives or Performance Objectives.
- 5-1.1 The instructor shall define the following terms and relate the concepts of these terms to fire service instructional activities.
 - (a) Developmental approach.
 - (b) Informational approach.
- 5-2* Occupational Analysis. The instructor shall construct an analysis of a typical fire service occupation by dividing the occupation into the following elements:
 - (a) Block.
 - (b) Unit.
 - (c) Task.
 - (d) Job.
 - (e) Operations.
 - (f) Key points.
- 5-3 Development of Materials.
- 5-3.1 Instructional Materials Development. The instructor shall prepare or select instructional materials, having analyzed organizational needs and programs.
 - (a) Projectable instructional materials
 - 1. Film strips.
 - 2. Motion pictures.
 - Slides.
 - Transparencies.
 - 5. Video tapes.

- (b) Nonprojectable instructional materials
 - 1. Audio materials.
 - 2. Blueprints.
 - 3. Mock-ups.
 - 4. Models.
 - 5. Photographs.
- (c) Printed Materials
 - 1. Information sheets.
 - 2. Program instructional manuals.
 - 3. Self-study material.
 - 4. Student workbooks.
 - 5. Student worksheets.
 - 6. Text books.
- 5-3.2 The instructor shall prepare, for developmental purposes, a comprehensive course outline that includes the following components:
- (a) Determination of the needs of students to be enrolled in the course.
 - (b) Behavioral objectives or performance objectives.
 - (c) Identification of the jobs to be taught.
 - (d) Organization of the jobs in a logical teaching sequence.
 - (e) Evaluation of the tentative course title.
- (f) Establishment of a tentative teaching time for each job and the entire course.

5-4 Evaluation.

- 5-4.1 Given lesson plans for which there are no prepared means for evaluating student knowledge or performance, the instructor shall construct a written examination, an oral examination, and a manipulative performance test, all of which meet the following requirements:
 - (a) Comprehensive.
 - (b) Effective.
 - (c) Free from ambiguities in content, administration and grading.
 - (d) Nondiscriminatory.
 - (e) Reliable.
 - (f) Valid.

- 5-4.2 The instructor shall construct an item analysis that will provide information regarding examination effectiveness and validity.
- 5-4.3 The instructor shall define the following terms and describe their implications in determining examination effectiveness:
 - (a) Distribution of scores.
 - (b) Frequency of scores.
 - (c) Interval.
 - (d) Mean.
 - (e) Median.
 - (f) Percentage scores.
 - (g) Percentile scores.
 - (h) Range of scores.
 - (i) Standard deviation.
- 5-4.4 Given a summary of test grades and the results of other evaluation procedures, the instructor shall:
 - (a) Determine causes of student failure to meet objectives.
 - (b) Prepare reports for superiors that summarize deficiencies.
- (c) Make recommendations for corrective action that will reduce future failures.
- 5-4.5* The instructor shall describe the requirements of the Equal Employment Opportunity Act, including guidelines and affirmative action efforts for employee selection and testing.
- 5-5 Training Records and Reports.
- 5-5.1 The instructor shall construct suitable training records and reports.
- 5-5.2 The instructor shall prepare an annual report.

Chapter 6 Instructor IV

- **6-1 General.** The objectives of this chapter are based on the ability of the instructor to demonstrate knowledge and skills in the following general subject areas:
 - (a) General Management Principles.
 - (b) Public Relations.
 - (c) Systems/Data Analysis.
 - (d) Training Program Management,
- 6-2 Course Development. The instructor shall construct a report that describes a specific need for training personnel.
- 6-3 Instructional Materials Development. Given the need for advanced instructional materials, the instructor shall analyze the need for and supervise the development of appropriate materials.

6-4 Personnel Management.

- **6-4.1** The instructor shall demonstrate knowledge of personnel management practices as they apply to the instructor's supervisory responsibilities.
- 6-4.2 The instructor shall demonstrate knowledge of management practices, including the following:
 - (a) Budget preparation and administration.
 - (b) Discipline.
 - (c) Grievance procedures.
 - (d) Hiring practices.
 - (e) Leadership.
 - (f) Motivation.
 - (g) Office management.
 - (h) Promotion policy.
 - (i) Staff development.
 - (j) Termination.
- 6-4.3 The instructor shall describe the application of computer technology as it relates to the training function.

- 6-5 Project Writing. The instructor shall prepare applications for funds that may be available from public and private sources.
- 6-6 Training Program Management.
- **6-6.1** The instructor shall construct a schedule for training programs and instructional personnel.
- **6-6.2** The instructor shall describe an appropriate procedure for selecting instructor personnel to teach technical fire service subjects based on their skill, knowledge and ability.
- **6-6.3** The instructor shall describe the procedure for determining need, development, and implementation of fire service training programs on an organizational level.