

9. **Matters referred from the Fire Fighter Advisory Committee (FFAC), including but not limited to:**
 - C. **Report from the Curriculum and Testing Committee with discussion and possible action on recommendations with regards to the following:**
 - a. **Fire Investigator, 1033 Matrix, curriculum outline and phase outline**
 - b. **Instructor I, II and III curricula, outlines and reference lists**
 - c. **Fire Officer III and IV reference lists**
 - d. **Basic Wildland Fire Fighter reference list**
 - e. **Intermediate Wildland Fire Fighter curriculum, outline, reference list and skill sheets**
 - f. **HazMat Operations Mission-Specific Competencies, HazMat Technician and HazMat Incident Commander reference lists**
 - g. **Appointment of Head of a Fire Department Ad Hoc Advisory Committee**

9. **Matters referred from the Fire Fighter Advisory Committee (FFAC), including but not limited to:**
 - C. **Report from the Curriculum and Testing Committee with discussion and possible action on recommendations with regards to the following:**
 - a. **Fire Investigator, 1033 Matrix, curriculum outline and phase outline**

**CHAPTER FIVE
FIRE INVESTIGATOR
COURSE OUTLINE**

SECTION	SUBJECT	RECOMMENDED HOURS
500 501-1	Commission on Fire Protection Rules and Regulations	0
500 501-2	INTENTIONALLY LEFT BLANK	0
500 501-3	Definitions	0
500 501-4	Basic Methodology	2
500 501-5	Basic Fire Science	8
500 501-6	Fire Patterns	8
500 501-7	Building Systems	4
500 501-8	Electricity and Fire	8
500 501-9	Building Fuel Gas Systems	4
500 501-10	Fire-Related Human Behavior	2
500 501-11	Legal Considerations	8
500 501-12	Safety	2
500 501-13	Sources of Information	8
500 501-14	Planning the Investigation	2
500 501-15	Documentation of the Investigation	8
500 501-16	Physical Evidence	4
500 501-17	Origin Determination	8
500 501-18	Fire Cause Determination	4
500 501-19	Analyzing the Incident for Cause and Responsibility	8
500 501-20	Failure Analysis and Analytical Tools	8
500 501-21	Explosions	4
500 501-22	Incendiary Fires	8
500 501-23	Fire and Explosion Deaths and Injuries	4
500 501-24	Appliances	2
500 501-25	Motor Vehicle Fires	8
500 501-26	Wildfire Investigations	3
500 501-27	Management of Complex Investigations	2
500 501-28	Marine Fire Investigations	3
501-29	Practical Exercises	20
	TOTAL HOURS RECOMMENDED	150

* The recommended hours for skills evaluation is based on 12 students. Actual hours needed will depend on the number of students, the number of examiners, availability of equipment, and the student skill level.

**CHAPTER FIVE
FIRE INVESTIGATOR
COURSE PHASE OUTLINE**

SECTION	SUBJECT	RECOMMENDED HOURS
FIRE INVESTIGATOR I – PHASE I		
500 501-4	Basic Methodology	2
500 501-14	Planning the Investigation	2
500 501-13	Sources of Information	4
500 501-11	Legal Considerations	6
500 501-12	Safety	2
500 501-5	Basic Fire Science	4
500 501-6	Fire Patterns	6
500 501-7	Building Systems	4
500 501-9	Building Fuel Gas Systems	2
500 501-17	Origin Determination	6
500 501-15	Documentation of the Investigation	6
500 501-16	Physical Evidence	4
501-29	Practical Exercises*	6
	Total Recommended Hours	54
FIRE INVESTIGATOR II – PHASE II		
500 501-18	Fire Cause Determination	4
500 501-10	Fire-Related Human Behavior	2
500 501-21	Explosions	4
500 501-23	Fire and Explosion Deaths and Injuries	3
500 501-8	Electricity and Fire	6
500 501-22	Incendiary Fires	6
500 501-19	Analyzing the Incident for Cause and Responsibility	6
500 501-20	Failure Analysis and Analytical Tools	6
500 501-24	Appliances	2
500 501-25	Motor Vehicle Fires	3
500 501-28	Marine Fire Investigations	2
500 501-26	Wildfire Investigations	2
500 501-27	Management of Complex Investigations	2
501-29	Practical Exercises*	8
	Total Recommended Hours	56
COMPLETER – PHASE III		
	Investigator I and II Review	8
501-29	Practical Exercises*	32
	Total Recommended Hours	40
TOTAL HOURS RECOMMENDED		150

*The recommended hours for skills evaluation is based on 12 students. Actual hours needed will depend on the number of students, the number of examiners, availability of equipment, and the student skill level.

9. **Matters referred from the Fire Fighter Advisory Committee (FFAC), including but not limited to:**
 - C. **Report from the Curriculum and Testing Committee with discussion and possible action on recommendations with regards to the following:**
 - b. **Instructor I, II and III curricula, outlines and reference lists**

REFERENCE LIST FOR THE FIRE INSTRUCTOR I CURRICULUM

Fire and Emergency Services Instructor (8th ed.). (2012). Stillwater, OK: International Fire Service Training Association, Oklahoma State University.

Fire Service Instructor: Principles and Practice (2nd ed.). (2014). Burlington, MA: Jones and Bartlett Learning.

NFPA 1041: Standard for Fire Service Instructor Professional Qualifications (2012 ed.). Quincy, MA: National Fire Protection Association. NFPA Publications.

NFPA 1401: Recommended Practice for Fire Service Training Reports and Records (2012 ed.). Quincy, MA: NFPA Publications. National Fire Protection Association.

NFPA 1403: Standard on Live Fire Training Evolutions (2012 ed.). Quincy, MA: NFPA Publications. National Fire Protection Association.

Standards Manual for Fire Protection Personnel. Austin, TX: Texas Commission on Fire Protection.

CHAPTER EIGHT
FIRE INSTRUCTOR I
CURRICULUM OUTLINE

SECTION	SUBJECT	RECOMMENDED HOURS
801-4.1	General	1
801-4.2	Program Management	7
801-4.3	Instructional Development	16
801-4.4	Instructional Delivery	16
801-4.5	Evaluation and Testing	8
	TOTAL RECOMMENDED HOURS	48

SECTION 801

FIRE INSTRUCTOR I

A Fire Instructor I is 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 (AHJ);
- organize the learning environment so that learning is maximized;
- meet the record-keeping requirements of the AHJ.

801-4.1 General

801-4.1.1 The Fire Service Instructor I shall meet the JPRs defined in Sections 801-4.2 through 801-4.5 and meet any other certification requirements.

801-4.2 Program Management

801-4.2.1 **Definition of Duty.** The management of basic resources and the records and reports essential to the instructional process.

801-4.2.2 Assemble course materials, given a specific topic, so that the lesson plan and all materials, resources, and equipment needed to deliver the lesson are obtained.

Requisite Knowledge. Components of a lesson plan, policies and procedures for the procurement of materials and equipment, and resource availability.

- 1) Components of a lesson plan
 - a) Lesson presentation preparation
 - b) Lesson title or topic
 - c) Time frame
 - d) Level of instruction
 - e) Behavioral objectives
 - f) Materials needed
 - g) Prerequisites
 - h) Instructor notes
 - i) References/resources

- 2) Policies and procedures for the procurement of materials and equipment, and resource availability

- a) Identify materials and equipment necessary
- b) Determine availability
- c) Acquire or reserve
- d) Alternate resource planning (backup plan)
- e) Return materials and equipment

Requisite Skills. None required.

801-4.2.3 Prepare requests for resources, given training goals and current resources, so that the resources required to meet training goals are identified and documented.

Requisite Knowledge. Resource management, sources of instructional resources and equipment.

- 1) **Resource management**
 - a) **Facilities**
 - b) **Apparatus**
 - c) **Equipment**
 - d) **Supplies**
- 2) **Sources of instructional resources and equipment**
 - a) **Government reports**
 - b) **Videos**
 - c) **Texts**
 - d) **Related websites**

Requisite Skills. Oral and written communication, forms completion.

801-4.2.4 Schedule single instructional sessions, given a training assignment, department scheduling procedures, instructional resources, facilities and timeline for delivery, so that the specified sessions are delivered according to department procedure.

Requisite Knowledge. Departmental scheduling procedures and resource management.

- 1) **Departmental scheduling procedures (AHJ)**
- 2) **Resource management**
 - a) **Scheduling facilities**
 - b) **Scheduling apparatus**
 - c) **Scheduling equipment**
 - d) **Scheduling supplies**

Requisite Skills. Training schedule completion.

801-4.2.5 **(This is the old 4.2.3)** Prepare **Complete** 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.

Requisite Knowledge. Types of records and reports required, and policies and procedures for processing records and reports.

- 1) Types of records and reports required
 - a) A daily training record
 - b) A company record
 - c) An individual training record
 - d) Special and summary records
- 2) Policies and procedures for processing records and reports
 - a) Federal, state and local requirements
 - b) Agency requirements
 - c) Training or facility provider requirements

Requisite Skills. Basic report writing and record completion.

801-4.3 **Instructional Development**

801-4.3.1 **Definition of Duty.** The review and adaptation of prepared instructional materials.

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

801-4.3.2 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.

801-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.

Requisite Knowledge. Recognition of student limitations and cultural diversity, methods of instruction, types of resource materials, organization of the learning environment, and policies and procedures.

- 1) Recognition of student limitations
 - a) Language
 - b) Learning disability
 - c) Learning style
 - d) Environment
 - e) Cultural and ethnicity
 - f) Physical
 - g) Motivation
 - h) Demographics
 - i) Literacy levels
 - j) Life experiences
 - k) Educational background
- 2) Methods of instruction
 - a) Identify appropriate delivery method for audience
 - i) Demonstration
 - ii) Illustration
 - iii) Lecture
 - iv) Discussion
 - v) Individualized instruction
- 3) Types of resource materials
 - a) Paper-based (books, handouts)
 - b) Electronic (internet, computer-based, audiovisual)
 - c) Subject matter experts (SMEs)
 - d) Equipment/tools of the trade
 - e) Facilities
 - f) Props
- 4) Organizing the learning environment
 - a) Seating
 - b) Lighting
 - c) Climate (indoors/outdoors)
 - d) Safety
 - e) Audiovisual (all inclusive)
 - f) Restrooms/break area
 - g) Noise/distractions
- 5) Policies and procedures
 - a) Federal, state and local requirements
 - b) Agency requirements
 - c) Training or facility provider requirements

Requisite Skills. Analysis of resources, facilities, and materials.

801-4.3.3 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.

801-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.

Requisite Knowledge. Elements of a lesson plan, selection of instructional aids and methods, and organization of the learning environment.

- 1) Elements of a lesson plan, from NFPA 1041 A.4.3.3(A)
 - a) Job title or topic
 - b) Level of instruction
 - c) Behavioral objectives, performance objectives, or learning outcomes
 - d) Instructional materials needed
 - e) References/resources
 - f) Preparation step (motivation)
 - g) Presentation step
 - h) Application step
 - i) Lesson summary
 - j) Evaluation step
 - k) Assignment

- 2) Selection of instructional aids and methods, from NFPA 1041 A.4.3.3(A)
 - a) Demonstration
 - b) Illustration
 - c) Lecture
 - d) Discussion
 - e) Individualized instruction

- 3) Organization of learning environment
 - a) Review lesson materials
 - b) Review training objectives
 - c) Determine capability of facilities and/or equipment
 - d) Select appropriate learning environment

- 4) **Elements of the communication process, from NFPA 1041 A.4.3.3(A)**
 - a) **Encoding**
 - b) **Transmitting**

- c) Receiving
- d) Decoding

Requisite Skills. Instructor preparation and organizational skills.

801-4.4 **Instructional Delivery**

801-4.4.1 **Definition of Duty.** The delivery of instructional sessions utilizing prepared course materials.

801-4.4.2 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.

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

- 1) Classroom management and safety
 - a) Security measures
 - b) Evacuation/safety plan
 - c) Safety devices in place/available
 - d) Climate controls
 - e) Proper lighting
- 2) Advantages and limitations of audiovisual equipment and teaching aids
 - a) Non-projected media
 - b) Projected media
 - c) Simulators
 - d) Computer technology
 - e) Audio equipment
- 3) Classroom arrangement
 - a) Seating/table arrangement
 - b) Classroom/training area access
 - c) Minimize distractions
 - d) Media placement
- 4) Methods and techniques of instruction
 - a) Demonstration
 - b) Illustration
 - c) Lecture
 - d) Discussion
 - e) Individualized instruction

Requisite Skills. Use of instructional media and teaching aids.

- 801-4.4.3 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, **applicable safety standards and practices are followed, and risks are addressed.**

Requisite Knowledge. The laws and principles of learning, teaching method techniques, **methods and techniques of instruction**, lesson plan components and elements of the communication process, and lesson plan terminology and definitions; **the impact of cultural differences on instructional delivery; safety rules, regulations and practices; identification of training hazards; elements and limitations of distance learning; distance learning delivery methods; and the instructor's role in distance learning.**

- 1) The laws and principles of learning
 - a) Thorndike's Laws of Learning
 - i) Readiness
 - ii) Exercise
 - iii) Effect
 - iv) Disuse
 - v) Association
 - vi) Recency
 - vii) Primacy
 - viii) Intensity
- 2) Teaching methods and techniques **Methods and techniques of instruction**
 - a) Demonstration
 - b) Illustration
 - c) Lecture
 - d) Discussion
 - e) Individualized instruction
 - f) Oral questioning
 - i) Overhead
 - ii) Rhetorical
 - iii) Relayed
 - iv) Directed
- 3) Lesson plan components and elements of the communication process, from NFPA 1041 A.4.3.3(A)
 - a) Lesson title or topic

- b) Level of instruction
 - c) Behavioral objectives, performance objectives, or learning outcomes
 - d) Instructional materials needed
 - e) References/resources
 - f) Preparation step (motivation)
 - g) Presentation step
 - h) Application step
 - i) Lesson summary
 - j) Evaluation step
 - k) Assignment
- 4) The elements of the communication process
- a) Sender
 - b) Message
 - c) Instructional medium
 - d) Receiver
 - e) Feedback
 - f) Environment
- 5) Lesson plan terminology and definitions
- a) Lesson plan
 - b) Lesson title or topic
 - c) Level of instruction
 - d) Behavioral objectives, performance objectives, or learning outcomes
 - e) Instructional materials (aids, tools and equipment, materials and supplies)
 - f) References
 - g) Resources
 - h) Preparation step (motivation of learner)
 - i) Presentation step
 - j) Application step
 - k) Lesson summary
 - l) Evaluation step
 - m) Assignment
- 6) **The impact of cultural differences on instructional delivery**
- a) **Student backgrounds**
 - i) **Cultural**
 - ii) **Ethnic**
 - b) **Values**
 - c) **Behaviors**
 - d) **Attitudes**

- 7) **Safety rules, regulations and practices**
 - a) **Applicable NFPA standards (i.e., 1403, etc.)**
 - b) **TCFP rules**
 - c) **Federal and state regulations**
 - d) **Departmental policies and procedures**
 - e) **Equipment manufacturers' recommendations**

- 8) **Identification of training hazards**
 - a) **Slips, trips and falls**
 - b) **Environmental**
 - c) **Thermal**
 - d) **Sharp objects**
 - e) **Mechanical**
 - f) **Chemical**
 - g) **Apparatus, machinery or equipment operations**

- 9) **Elements and limitations of distance learning**
 - a) **Students and instructors are in separate locations**
 - b) **Interactive media used for communications and instruction**
 - i) **Internet/intranet**
 - ii) **Interactive television**
 - iii) **Mail/e-mail**
 - c) **Instructor difficulties**
 - i) **No immediate feedback**
 - ii) **Limited interaction**
 - d) **Student difficulties**
 - i) **Motivation**
 - ii) **Time allocation**
 - iii) **Technical difficulties**

- 10) **Distance learning delivery methods, from NFPA 1041 A.4.4.3(A)**
 - a) **Online learning**
 - b) **Blended e-learning**
 - c) **Web-based instruction**
 - d) **Computer-based training**
 - e) **Interactive television**
 - f) **Podcasts**

- 11) **The instructor's role in distance learning**
 - a) **Functions as a facilitator**

Requisite Skills. Oral communication techniques, teaching methods and techniques **of instruction**, and utilization of lesson plans in the **an** instructional setting.

- 801-4.4.4 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.

Requisite Knowledge. Methods of dealing with changing circumstances.

- 1) Methods of dealing with changing circumstances
 - a) The Instructor I should be able to adjust to such changing circumstances as the following
 NFPA 1041 A.4.4.4
 - i) Equipment failure
 - ii) Weather
 - iii) Audio and visual distractions
 - iv) Safety
 - v) Limited resources
 - vi) Presentation location
 - vii) Interruptions (e.g. emergency response)
 - b) The Instructor I should **not** alter the content or the lesson objectives in this process.

Requisite Skills. None required.

- 801-4.4.5 Adjust to differences in learning styles, abilities, **cultures** and behaviors, given the instructional environment, so that lesson objectives are accomplished, disruptive behavior is addressed, and a safe learning environment is maintained.

801-A.4.4.5 Examples of disruptive behavior include, but are not limited to, harassment, abuse, discrimination, disruption of training, horseplay, and a lack of respect for others.

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

- 1) Factors that could influence the learning process, from NFPA 1041 A.4.4.5(A)
 - 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
- 2) Motivation techniques
- a) Define motivation
 - b) Maslow's Hierarchy of Needs
 - i) Physiological
 - ii) Security
 - iii) Social
 - iv) Self-esteem
 - v) Self-actualization
 - c) Herzberg's Job Enrichment Model
 - i) Dissatisfiers (Hygiene Factors)
 - (1) Relationships
 - (2) Supervision quality
 - (3) Policies and administration
 - (4) Working conditions
 - (5) Personal life
 - ii) Satisfiers (Motivator Factors)
 - (1) Achievement
 - (2) Recognition
 - (3) Work
 - (4) Responsibility
 - (5) Advancement
- 3) Learning styles
- a) Auditory
 - b) Kinesthetic
 - c) Visual
 - d) Tactile
- 4) Types of learning disabilities and methods for dealing with them
- a) Slow learner
 - b) Memory
 - c) Auditory/visual perception
 - d) Oral language
 - e) Speaking, listening, writing difficulties
 - f) Word recognition/comprehension
 - g) Math deficient
 - h) Methods to handle may include:
 - i) Counseling
 - ii) Coaching
 - iii) Peer assistance
 - iv) Mentoring

- 5) Methods of dealing with disruptive and unsafe behavior
 - a) Non-intentionally disruptive learner
 - i) Shy or timid
 - ii) Quiet or bored
 - iii) Uninterested
 - iv) "Intellectual" (knowledgeable, resource for the class)
 - v) "Explorer" (highly motivated to learn, challenges instructor)
 - b) Intentionally disruptive learner
 - i) Talkative and aggressive
 - ii) Show off
 - iii) Fast learner (may become bored or challenge the instructor)
 - iv) "Prisoner" (required attendance)
 - v) "Vacationer" (not interested in learning, but in having a good time elsewhere at someone else's expense)
 - vi) "Pseudo intellectual" (tries to impress others ... know it all)
 - c) Unsafe behaviors
 - i) Improper use of equipment
 - ii) Not following safety procedures/standards
 - iii) Horseplay
 - d) Methods to handle may include:
 - i) Coaching
 - ii) Use of motivational techniques
 - iii) Discipline
 - iv) Adaptation of lesson plan or materials

Requisite Skills. Basic coaching and motivational techniques, **correction of disruptive behaviors**, and adaptation of lesson plans or materials to specific instructional situations.

801-4.4.6 Operate audiovisual equipment and demonstration devices, given a learning environment and equipment, so that the equipment functions properly.

Requisite Knowledge. Components of audiovisual equipment.

- 1) Components of audiovisual equipment
 - a) Visual aids may include, but are not limited to the following:
 - i) Non-projected visuals
 - (1) Pictures
 - (2) Drawings
 - (3) Charts
 - (4) Graphs
 - (5) Maps
 - (6) Posters
 - (7) Flipcharts

- (8) Cutaways
- (9) Models
- (10) Handouts
- (11) Actual objects
- ii) Projected visuals
 - (1) Slides
 - (2) Transparencies
 - (3) Document cameras
- iii) Digital image projection
 - (1) Presentation software (e.g., PowerPoint)
- b) Audio aids may include, but are not limited to the following:
 - i) Audio tapes
 - ii) Audio CDs
 - iii) MP3s
 - ~~iv) Cassettes~~
 - v) Microphones
 - vi) Speakers
 - vii) Amplifiers
- c) Audiovisual aids may include, but are not limited to the following:
 - i) Videotapes
 - ii) DVDs
 - iii) Presentation software (e.g., PowerPoint)
 - iv) CDs
 - v) Simulation software
- d) Other equipment may include, but is not limited to the following:
 - i) Dry erase board
 - ii) Chalk board
 - iii) Electronic copy board
 - iv) Pointing devices
 - v) Timekeeping devices
 - vi) Screens
- e) Set up, usage and storage of audiovisual equipment according to manufacturer's recommendations may include, but is not limited to the following:
 - i) Cleaning lenses, focus/image adjustment (Keystone), power supply, lighting
 - ii) Volume levels
 - iii) Change bulbs
 - iv) Package for storage/transport
 - v) Changing filters
 - vi) Changing batteries
 - vii) Spare batteries
 - viii) Component interface (cables/drivers)
 - ix) Cleaning supplies
 - x) Chalk/markers/erasers

xi) Screens

Requisite Skills. Use of audiovisual equipment, cleaning, and field level maintenance.

801-4.4.7 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.

Transitions are the connections between training segments and/or media. They should be:

- Smooth
- Clear
- Concise
- Understandable
- Compatible

Requisite Knowledge. Media types, limitations, and selection criteria.

- 1) Media types, limitations, and selection criteria
 - a) Visual media
 - i) Limitations
 - ii) Selection criteria
 - b) Audio media
 - i) Limitations
 - ii) Selection criteria
 - c) Audiovisual media
 - i) Limitations
 - ii) Selection criteria
 - d) Other media types
 - i) Limitations
 - ii) Selection criteria

Requisite Skills. Transition techniques within and between media.

801-4.5 **Evaluation and Testing**

801-4.5.1 **Definition of Duty.** The administration and grading of student evaluation instruments.

801-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.

801-4.5.2 Administer oral, written, and performance tests, given the lesson plan, evaluation instruments, and the evaluation procedures of the agency, so that **bias or discrimination is eliminated**, the testing is conducted according to procedures and the security of the materials is maintained.

Requisite Knowledge. Test administration, agency policies, **laws and policies pertaining to discrimination during training and testing, methods for eliminating testing bias**, laws affecting records and disclosure of training information, purposes of evaluation and testing, and performance skills evaluation.

- 1) Test administration
 - a) Oral
 - i) Environmental preparation
 - ii) Eliminating bias
 - iii) Reducing test anxiety
 - iv) Security
 - v) Procedures
 - vi) Test materials
 - b) Written
 - i) Environmental preparation
 - ii) Eliminating bias
 - iii) Reducing test anxiety
 - iv) Security
 - v) Procedures
 - vi) Test materials
 - c) Performance
 - i) Environmental preparation
 - ii) Eliminating bias
 - iii) Reducing test anxiety
 - iv) Security
 - v) Procedures
 - vi) Safety
 - vii) Equipment and supplies
 - viii) Test materials
- 2) Agency policies
 - a) Oral testing
 - b) Written testing
 - c) Performance testing
 - d) Record keeping
- 3) **Laws and policies pertaining to discrimination during training and testing**
 - a) **Federal**

- b) State
 - c) Local
- 4) Methods for eliminating testing bias
- a) Identify bias
 - b) Report bias (AHJ)
 - c) Avoid bias
- 5) Laws affecting records and disclosure of training information
- a) Federal
 - i) Family Educational Rights and Privacy Act (FERPA)
 - ii) Occupational Safety and Health Administration (OSHA)
 - b) State
 - i) Texas Commission on Fire Protection (TCFP)
 - ii) Texas Commission on Law Enforcement Officer Standards and Education (TCLEOSE)
 - iii) Texas Department of State Health Services (DSHS)
 - c) Local
 - i) AHJ (e.g., civil service, public health authority, local ordinance)
- 6) Purposes of evaluation and testing
- a) Determine if objectives are met
 - b) Feedback
 - i) To students
 - ii) To instructors
 - c) Student motivation
 - d) Instructor effectiveness
- 7) Performance skills evaluation
- a) Verifies Job Performance Requirements (JPRs)

Requisite Skills. Use of skills checklists and oral questioning techniques.

801-4.5.3 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.

Requisite Knowledge. Grading methods, methods for eliminating bias during grading, and maintaining confidentiality of scores.

- 1) Grading techniques methods
 - a) Manual grading
 - i) Verify correct answer key
 - ii) Tabulate results

- b) Optical mark readers
 - i) Familiarization with grading equipment
 - ii) Verify correct answer key
 - iii) Tabulate results
- c) Computer based
 - i) Familiarization with grading equipment
 - ii) Verify correct answer key
 - iii) Tabulate results
- d) Consistency
 - i) Elimination of bias
 - ii) Fairness
 - iii) Uniform application of grading criteria
- e) Security
 - i) Evaluation instrument (e.g., exam, skill sheet)
 - ii) Answer key

2) Methods for eliminating bias during grading

- a) Identify bias
- b) Report bias (AHJ)
- c) Avoid bias

- 3) Confidentiality of scores
 - a) Individual
 - b) Group

Requisite Skills. None required.

801-4.5.4 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.

Requisite Knowledge. Reporting procedures and the interpretation of test results.

- 1) Reporting procedures
 - a) Recording results
 - i) Written
 - ii) Electronic
 - b) Reporting results
 - i) Unusual circumstances noted
 - ii) Forward results according to local procedure
- 2) The interpretation of test results
 - a) Follows grading guidelines

- b) Determines pass/fail
- c) Determines need for retest
- d) Notes trends

Requisite Skills. Communication skills and basic coaching.

801-4.5.5 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; and objective, clear, and relevant; also include suggestions based on the data.

801-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.

Requisite Knowledge. Reporting procedures and the interpretation of test results.

- 1) Reporting procedures
 - a) Explain grading criteria
 - b) Report results to examinee(s) in a timely manner
 - c) Individual score
 - d) Range of scores
 - e) Number of passing scores
- 2) The interpretation of test results
 - a) Provide evaluation feedback
 - i) Timely
 - ii) Objective
 - iii) Clear
 - iv) Specific
 - v) Relevant
 - b) Recognize outstanding performance
 - c) Make suggestions for improvement as needed

Requisite Skills. Communication skills and basic coaching.

REFERENCE LIST FOR THE FIRE INSTRUCTOR II CURRICULUM

Fire and Emergency Services Instructor (8th ed.). (2012). Stillwater, OK: International Fire Service Training Association, Oklahoma State University.

Fire Service Instructor: Principles and Practice (2nd ed.). (2014). Burlington, MA: Jones and Bartlett Learning.

NFPA 1041: Standard for Fire Service Instructor Professional Qualifications (2012 ed.). Quincy, MA: National Fire Protection Association. NFPA Publications.

NFPA 1401: Recommended Practice for Fire Service Training Reports and Records (2012 ed.). Quincy, MA: NFPA Publications. National Fire Protection Association.

NFPA 1403: Standard on Live Fire Training Evolutions (2012 ed.). Quincy, MA: NFPA Publications. National Fire Protection Association.

Standards Manual for Fire Protection Personnel. Austin, TX: Texas Commission on Fire Protection.

CHAPTER EIGHT
FIRE INSTRUCTOR II
CURRICULUM OUTLINE

SECTION	SUBJECT	RECOMMENDED HOURS
802-5.1	General	1
802-5.2	Program Management	16
802-5.3	Instructional Development	12
802-5.4	Instructional Delivery	7
802-5.5	Evaluation and Testing	12
	TOTAL RECOMMENDED HOURS	48

SECTION 802

FIRE INSTRUCTOR II

A Fire Instructor II is 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 the authority having jurisdiction (AHJ)
- **Supervise and coordinate the activities of other instructors**

802-5.1 General

For certification at Level II, the Fire Instructor I shall meet the job performance requirements (JPRs) defined in Sections 802-5.2 through 802-5.5 of this standard.

802-5.2 Program Management

802-5.2.1 **Definition of Duty.** The management of instructional resources, staff, facilities, and records and reports.

802-5.2.2 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.

Requisite Knowledge. Departmental policy, scheduling processes, supervision techniques, and resource management.

- 1) Types of training schedules
 - a) Periodic training schedule/station training
 - b) Periodic training schedule/training facility activities
 - c) All other training
 - i) Recruit
 - ii) In-service
 - iii) Special
 - iv) Officer
 - v) Advanced
 - vi) Mandated
- 2) Departmental policy
 - a) Staffing levels (e.g., overtime issues; in service versus out of service – emergency response availability)

- b) Mandated versus non-mandated training
- 3) Scheduling processes
 - a) Shift scheduling
 - b) Administrative
 - c) Support personnel
 - d) Knowledge of class offering
 - i) Time and place
 - ii) Prerequisites
 - iii) Resources: websites, brochures, catalogs
- 4) Supervision techniques
 - a) Selection of instructional staff
 - i) Lead instructors
 - ii) Assistant instructors
 - iii) Examiners or proctors
- 5) Resource management
 - a) Facilities
 - b) Materials and supplies
 - c) Prop acquisition
 - d) Apparatus status (emergency response availability)

Requisite Skills. None required.

802-5.2.3 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.

Requisite Knowledge. Agency budget policy, resources management, needs analysis, sources of instructional materials, and equipment.

- 1) Agency budget policy
 - a) Meet timelines
 - b) Comply with approval process
 - c) Justify requests
- 2) Resource management
 - a) Facilities
 - b) Apparatus
 - c) Equipment
 - d) Supplies
- 3) Needs analysis
 - a) Identify need for training

- i) External mandates
 - ii) Departmental goals (short-term and long-term)
 - iii) Correct deficiencies
 - iv) Maintain proficiency
- b) Determine solution
- c) Costs for implementation
 - i) Personnel
 - ii) Facilities
 - iii) Equipment
 - iv) Supplies
 - v) Contingency
- 4) Sources of instructional materials and equipment
 - a) Publishers
 - b) Government publications
 - c) Manufacturers
 - d) Associations
 - e) Educational institutions
 - f) Websites

Requisite Skills. Resource analysis and forms completion.

802-5.2.4 Acquire training resources, given an identified need, so that the resources are obtained within established timelines, budget constraints, and according to agency policy.

Requisite Knowledge. Agency policies, purchasing procedures, and budget management.

- 1) Agency policies
 - a) Knowledge of agency policies and procedures
 - b) Rules and regulations
- 2) Purchasing procedures (acquisition procedures)
 - a) Identify product or service
 - b) Identify supplier
 - c) Follow requisition procedures
 - d) Follow approval path
 - e) Confirm delivery
- 3) Budget management
 - a) Budget constraints
 - b) Track expenditures
 - c) Amendments

Requisite Skills. Forms completion.

- 802-5.2.5 Coordinate training record-keeping, given training forms, department policy, and training activity, so that all agency and legal requirements are met.

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

- 1) Types of training records

NFPA 1401

 - a) Departmental training record
 - b) Individual special course record
 - c) Individual training record
 - d) Progress chart
 - e) Certification training record (Firefighter)
 - f) Educational courses
 - g) Vocational courses
 - h) Seminars and other training
 - i) Periodic company summary
 - j) Chief officers' periodic training summary
 - k) Group training records and evaluation
- 2) Record keeping processes
 - a) Electronic
 - b) Paper-based (hard copy)
- 3) Departmental policies
 - a) Record retention
 - b) Security
 - c) Tracking
- 4) Laws affecting records and disclosure of training information
 - a) Federal
 - i) Family Educational Rights and Privacy Act (FERPA)
 - ii) Occupational Safety and Health Administration (OSHA)
 - b) State
 - i) Texas Commission of Fire Protection (TCFP)
 - ii) Texas Commission on Law Enforcement Officer Standards and Education (TCLEOSE)
 - iii) Texas Department of State Health Services (DSHS)
 - c) Local – AHJ (e.g., civil service, public health authority, local ordinance)

- 5) Professional standards applicable to training records
 - a) Detailed to enable factual reporting, while remaining as simple as possible
 - b) Kept to a minimum to avoid confusion and duplication of effort
 - c) Secured and confidential

- 6) Databases used for record keeping
 - a) Cost effective method of processing comprehensive data
 - b) Allow for report generation
 - c) Allow quick access to data
 - d) Improve security
 - e) Decrease storage space problems
 - f) Maintain back up records

Requisite Skills. Record auditing procedures.

802-5.2.6 Evaluate instructors, given an evaluation form, department policy, and job performance requirements (JPRs), 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.

Requisite Knowledge. Personnel evaluation methods, supervision techniques, department policy, and effective instructional methods and techniques.

- 1) Personnel evaluation methods
 - a) Observation
 - b) Student feedback
 - c) Student performance
 - d) Instructor characteristics
 - i) Ability
 - ii) Knowledge
 - iii) Experience
 - iv) Instructional methods
 - v) Organization

- 2) Supervision techniques
 - a) Directing
 - b) Coaching
 - c) Supporting
 - d) Delegating

- 3) Department policy

- a) Knowledge of departmental policies and procedures, rules and regulations
- 4) Effective instructional methods and techniques
 - a) Lecture
 - b) Discussion
 - c) Illustration
 - d) Demonstration

Requisite Skills. Coaching, observation techniques, and completion of evaluation forms.

802-5.3 **Instructional Development**

802-5.3.1 **Definition of Duty.** The development of instructional materials for specific topics.

802-5.3.2 Create a lesson plan, given a topic, audience characteristics, and a standard lesson plan format, so the ~~job performance requirements~~ **JPRs or learning objectives** for the topic are ~~achieved~~ **addressed**, and the plan includes learning objectives, a lesson outline, course materials, instructional aids, and an evaluation plan.

Requisite Knowledge. Elements of a lesson plan, components of learning objectives, ~~instructional methods and techniques~~ **of instruction**, characteristics ~~principles~~ of adult learners **learning, techniques for eliminating bias in instructional materials**, types and application of instructional media, evaluation techniques, and sources of references and materials.

- 1) Elements of a lesson plan
 - a) Job title or topic
 - b) Level of instruction
 - c) JPRs, 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
- 2) Components of learning objectives

- a) Audience (**may be implied**)
 - b) Behavior **statement**
 - c) Conditions **description**
 - d) Degree (**standards criteria**)
- 3) Instructional Methods and techniques **of instruction**
(i.e., uses, advantages, disadvantages, and limitations/requirements)
- a) Lecture
 - b) Demonstration
 - c) Illustration
 - d) Directed activity
 - e) Oral questioning
 - i) Overhead
 - ii) Rhetorical
 - iii) Relayed
 - iv) Directed
 - f) Discussion
 - g) Reading
 - h) Individualized instruction
 - i) Role-play
 - j) Case studies
 - k) Conference
 - l) Brainstorming
 - m) Team teaching
 - n) Mentoring
- 4) Characteristics **Principles** of adult learners **learning** (Malcolm Knowles)
- a) Autonomous and self-directed
 - b) Personal experience and knowledge
 - c) Goal oriented
 - d) Relevancy oriented
 - e) Practical
 - f) Need for respect
- 5) **Techniques for eliminating bias in instructional materials**
- a) **Adhere very closely to the source material that is being taught**
 - b) **Be very careful in the wording used (i.e. gender neutral)**
 - c) **Avoid references to specific cultural backgrounds and stereotypes**
- 6) Types and application of instructional media
- a) Visual aids
 - b) Audio aids
 - c) Audiovisual aids

- 7) Evaluation techniques
 - a) Written
 - b) Performance
 - c) Role-play

- 8) Sources of references and materials
 - a) Publishers
 - b) Government publications
 - c) Manufacturers
 - d) Associations
 - e) Educational institutions
 - f) websites

Requisite Skills. Basic research, using JPRs to develop behavioral objectives, student needs assessment, development of instructional media, outlining techniques, evaluation techniques, and resource needs analysis.

- 802-5.3.3 Modify an existing lesson plan, given a topic, audience characteristics, and a lesson plan, so that the ~~job performance requirements~~ **JPRs** or learning objectives for the topic are ~~achieved~~ **addressed** and the plan includes learning objectives, a lesson outline, course materials, instructional aids, and an evaluation plan.

Requisite Knowledge. Elements of a lesson plan, components of learning objectives, instructional methods and techniques of **instruction**, characteristics **principles** of adult **learners learning, techniques for eliminating bias in instructional materials**, types and application of instructional media, evaluation techniques, and sources of references and materials.

- 1) Elements of a lesson plan – from NFPA 1041 A.4.3.3(A)
 - a) Lesson title or topic
 - b) Level of instruction
 - c) Behavioral objectives, performance objectives, or learning outcomes
 - d) Instructional materials needed
 - e) References/resources
 - f) Preparation step (motivation)
 - g) Presentation step
 - h) Application step
 - i) Lesson summary
 - j) Evaluation step
 - k) Assignment

- 2) Components of learning objectives
 - a) Audience **(may be implied)**
 - b) Behavior **statement**
 - c) Conditions **description**
 - d) Degree **(standards criteria)**

- 3) ~~Instructional~~ Methods and techniques **of instruction**
 - a) Lecture
 - b) Demonstration
 - c) Illustration
 - d) Directed activity
 - e) Oral questioning
 - i) Overhead
 - ii) Rhetorical
 - iii) Relayed
 - iv) Directed
 - f) Discussion
 - g) Reading
 - h) Individualized instruction
 - i) Role-play
 - j) Case studies
 - k) Conference
 - l) Brainstorming
 - m) Team teaching
 - n) Mentoring

- 4) Characteristics **Principles** of adult learners **learning** (Malcolm Knowles)
 - a) Autonomous and self-directed
 - b) Personal experience and knowledge
 - c) Goal oriented
 - d) Relevancy oriented
 - e) Practical
 - f) Need for respect

- 5) **Techniques for eliminating bias in instructional materials**
 - a) **Adhere very closely to the source material that is being taught**
 - b) **Be very careful in the wording used (i.e. gender neutral)**
 - c) **Avoid references to specific cultural backgrounds and stereotypes**

- 6) Types and application of instructional media
 - a) Visual aids
 - b) Audio aids

- c) Audiovisual aids
- 7) Evaluation techniques
 - a) Written
 - b) Performance
 - c) Role-play
- 8) Sources of references and materials
 - a) Publishers
 - b) Government publications
 - c) Manufacturers
 - d) Associations
 - e) Educational institutions
 - f) Websites

Requisite Skills. Basic research, using JPRs to develop behavioral objectives, student needs assessment, development of instructional media, outlining techniques, evaluation techniques, and resource needs analysis.

802-5.4 **Instructional Delivery**

802-5.4.1 **Definition of Duty.** Conducting classes using a lesson plan.

802-5.4.2 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.

Requisite Knowledge. Use and limitations of teaching methods and techniques.

- 1) Use a limitations of teaching methods and techniques
 - a) Audiences with advanced knowledge or experience
 - b) Problem solving
 - c) Reaching group solution
 - d) Reaching group consensus

Requisite Skills. Transition between different teaching methods.

802-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.

802-5.4.3 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.

802-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 or NFPA 1403, *Standard on Live Fire Training Evolutions*, for information regarding the responsibilities of personnel involved in live fire training evolutions.

Requisite Knowledge. Safety rules, regulations, and practices; the incident command system used by the agency; and leadership techniques.

- 1) Safety rules
 - a) Department/organizational safety rules
 - b) Student/instructor ratio
 - c) Apparatus/instructor ratio
 - d) Personal protective equipment (PPE)
- 2) Regulations and practices
 - a) Occupational Safety and Health Administration (OSHA)
 - b) National Fire Protection Association (NFPA)
 - i) NFPA 1403 Annex C
 - (1) Instructor-In-Charge
 - (2) Safety Officer
 - (3) Instructor
 - (4) Student
 - ii) Applicable NFPA Standards for increased hazard training (e.g., Hazardous Materials, Rescue, Driver/Operator, Diver)
 - c) TCFP Rule 427.18 – Live Fire Training Evolutions
- 3) The incident command system used by the agency
 - a) Department/organizational incident management policy
 - b) National Incident Management System (NIMS)
- 4) Leadership techniques
 - a) Lead by example
 - b) Coaching/mentoring
 - c) Command presence (When in charge, take charge)
 - d) Image

Requisite Skills. Implementation of an incident management system used by the agency.

802-5.5 **Evaluation and Testing**

802-5.5.1 **Definition of Duty.** The development of student evaluation instruments to support instruction and the evaluation of test results.

802-5.5.2 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 **relative** performance in an objective, reliable, and verifiable manner; and the evaluation instrument is bias-free to any audience or group.

Requisite Knowledge. Evaluation methods, development of forms, effective instructional methods, and techniques.

- 1) Evaluation methods
 - a) Classification of tests
 - i) Criterion-referenced
 - ii) Norm-referenced
 - iii) Prescriptive
 - iv) Progress (formative)
 - v) Comprehensive (summative)
 - b) Administration
 - i) Oral
 - ii) Written
 - iii) Performance
 - c) Objective
 - i) Recognition
 - ii) Recall
 - d) Subjective
 - i) Performance
 - ii) Essay
 - e) Characteristics of good tests
 - i) Objective
 - (1) Non-biased
 - (2) Measurable
 - ii) Valid
 - iii) Reliable
 - iv) Comprehensive
 - v) Convenient
- 2) Development of forms

a) Test instruments should include instructions, a sample response, questions, a method of recording answers, scoring and documentation of results for the following written and oral test types.

i) Written tests

- (1) True/false
- (2) Multiple choice
- (3) Matching
- (4) Short answer
- (5) Fill in the blank
- (6) Pictorial recall
- (7) Essay

ii) Oral tests

iii) Performance evaluation (Skills Testing)

- (1) Reviewing the objectives
- (2) Identifying the steps
- (3) Identifying safety points
- (4) Determining the mastery standard
- (5) Establishing rating factors
- (6) Determining grading criteria
- (7) Preparing instructions for students and evaluator

3) Effective instruction methods

a) Evaluation process

- i) Criteria
- ii) Evidence
- iii) Judgment

4) Techniques

a) Administering evaluations

- i) Maintain integrity of test
- ii) Take test to ensure correct answer key
- iii) Adhere to schedule if timed
- iv) Establish procedures for trainees to ask questions
- v) Require trainees to return all tests
- vi) Posting of grades requires prior written permission of trainees (FERPA)

b) Procedures for written tests

- i) Notify of test in advance
- ii) Test immediately after subject is completed
- iii) Mark incorrect answers on test
- iv) Review and discuss with students
- v) Study incorrect answers – item analysis
- vi) Put grades on paper and notify student
- vii) Revise teaching methods/materials if indicated

- c) Procedures for performance evaluations
 - i) Notify of test in advance
 - ii) Ensure equipment is working properly
 - iii) Have area and materials set up
 - iv) Follow all safety procedures
 - v) Be sure trainee understands task
 - vi) Check off each step on performance evaluation form – never sign off unless **you** have seen it done
 - vii) Insure fairness to all trainees
 - viii) Maintain ethical conduct
 - ix) Verify competency and determine if objective has been met
 - x) Revise teaching methods/materials if indicated

Requisite Skills. Evaluation item construction and assembly of evaluation instruments.

- 802-5.5.3 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.

Requisite Knowledge. Evaluation methods and test validity.

- 1) Evaluation methods
 - a) Formative evaluation
 - i) Field testing
 - ii) Observation
 - b) Summative evaluation
 - i) Course feedback
 - ii) Using evaluation results
 - (1) Determine cause of failure
 - (2) Identify actions to correct
 - (3) Document and report results
- 2) Test validity
 - a) Extent to which a test measures what it is supposed to measure
 - b) Validation process

Requisite Skills. Development of evaluation forms.

Below - 5.5.4 is no longer in chapter 5 of NFPA 1041. This material was moved to Chapter 6 (Instructor III), 6.5.5.

802-5.5.4 Analyze student evaluation instruments, given test data, objectives and agency policies, so that validity is determined and necessary changes are accomplished.

Requisite Knowledge: Test validity, reliability, and item analysis.

- 1) Test validity
 - a) A valid test requires the learner to perform the same behavior under the same conditions specified in the instructional objective
 - b) Match test item to the objective
 - c) Test only skills that relate to the objective
 - d) Test at proper learning level
 - e) No tricks
 - f) Subjects weighted and distributed properly
 - g) Accurate predictor of field performance
- 2) Reliability
 - a) A reliable test provides a consistent measure of a student's ability to demonstrate achievement of an objective
 - b) Contains no clues
 - c) Distractors are realistic
 - d) Order of answers is random
 - e) Is written clearly
 - f) Uses negatives carefully
- 3) Item analysis
 - a) Determine percentage of students who missed the question
 - b) Determine why question was missed
 - c) Revise question or instruction as necessary

REFERENCE LIST FOR THE FIRE INSTRUCTOR III CURRICULUM

Fire and Emergency Services Instructor (8th ed.). (2012). Stillwater, OK: International Fire Service Training Association, Oklahoma State University.

Fire Service Instructor: Principles and Practice (2nd ed.). (2014). Burlington, MA: Jones and Bartlett Learning.

NFPA 1041: Standard for Fire Service Instructor Professional Qualifications (2012 ed.). Quincy, MA: National Fire Protection Association. NFPA Publications.

NFPA 1401: Recommended Practice for Fire Service Training Reports and Records (2012 ed.). Quincy, MA: NFPA Publications. National Fire Protection Association.

NFPA 1403: Standard on Live Fire Training Evolutions (2012 ed.). Quincy, MA: NFPA Publications. National Fire Protection Association.

Standards Manual for Fire Protection Personnel. Austin, TX: Texas Commission on Fire Protection.

CHAPTER EIGHT
FIRE INSTRUCTOR III
CURRICULUM OUTLINE

SECTION	SUBJECT	RECOMMENDED HOURS
803-6.1	General	1
803-6.2	Program Management	15
803-6.3	Instructional Development	32
803-6.4	Instructional Delivery	0
803-6.5	Evaluation and Testing	16
	TOTAL RECOMMENDED HOURS	64

SECTION 803

FIRE INSTRUCTOR III

A Fire Instructor III is 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**
- **develop training goals and implementation strategies**

803-6.1 General

For certification at Level III, the Fire Instructor II shall meet the job performance requirements (JPRs) defined in Sections 803-6.2 through 803-6.5 of this standard.

803-6.2 Program Management

803-6.2.1 **Definition of Duty.** The administration of agency policies and procedures for the management of instructional resources, staff, facilities, records, and reports.

803-6.2.2 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.

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

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

- 1) Agency policy – Authority having jurisdiction (AHJ)
- 2) Record-keeping systems
 - a) Electronic
 - b) Paper
- 3) Professional standards addressing training records – NFPA 1401

- 4) Legal requirements affecting record keeping, and disclosure of information
 - a) Federal
 - b) State
 - c) Local

Requisite Skills. Development of forms and report generation.

- 803-6.2.3 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.

Requisite Knowledge. Agency procedures and training program goals, and format for agency policies.

- 1) Agency procedures and training program goals
 - a) Training program goals
 - i) Required training (e.g., state certification)
 - ii) Maintenance training (e.g., continuing education)
 - iii) Implementing change training (e.g., updated safety policy)
 - iv) Professional development program (e.g., career advancement/enhancement)
 - b) Types of policies and procedures
 - i) Standard operating procedures (SOPs)
 - ii) Standard operating guidelines (SOGs)
 - iii) Administrative policies and procedures
 - c) Policy and procedure development process
 - i) Identifying a need
 - ii) Revision
 - iii) Adoption
 - iv) Implementation
 - v) Evaluation
- 2) Format for agency policies
 - a) Standardized appearance
 - b) Standardized data collection
 - c) Authority Having Jurisdiction AHJ

Requisite Skills. Technical writing.

- 803-6.2.4 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.

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

- 1) Agency policies regarding staff selection – AHJ
- 2) Instructional requirements
 - a) Certifications
 - b) Experience
 - c) Education
 - d) Qualifications
 - e) Communication skills
 - f) Credibility
- 3) Selection methods
 - a) Application packet
 - i) Cover letter
 - ii) Resume
 - iii) Application
 - iv) Supporting documents
 - b) Interview
 - c) Evaluation
 - i) Knowledge-based
 - ii) Skill-based
- 4) The capabilities of instructional staff
 - a) Subject matter expertise
 - i) Knowledge levels
 - ii) Skill levels
 - b) Interpersonal dynamics
 - i) Supervisors
 - ii) Coworkers
 - iii) Subordinates
 - iv) Students
 - v) Public
- 5) Agency goals
 - a) Needs-based instructor selection

Requisite Skills. Evaluation techniques.

- 803-6.2.5 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.

Requisite Knowledge. Evaluation methods, agency policies, staff schedules, and job requirements.

- 1) Evaluation methods
 - a) Observation
 - b) Student feedback
 - c) Analysis of performance measures (e.g., pass/fail rates, test scores)
 - d) Critiquing instructor performance
 - i) Positive comments
 - ii) Areas needing improvement
 - iii) Comments should refer to specific behaviors
 - iv) Schedule a follow up meeting
- 2) Agency policies – AHJ
- 3) Staff schedules
- 4) Job requirements - AHJ

Requisite Skills. Evaluation techniques.

803-6.2.6 Write equipment purchasing specifications, given curriculum information, training goals, and agency guidelines, so that the equipment is appropriate and supports the curriculum.

Requisite Knowledge. Equipment purchasing procedures, available department resources, and curriculum needs.

- 1) Curriculum needs
 - a) Identification
 - b) Specifications
- 2) Available department resources
 - a) Budget
 - b) Equipment
- 3) Equipment purchasing procedures
 - a) Market research
 - b) Resource locations
 - c) Specification development
 - d) Competitive pricing
 - e) Other agency procedures

Requisite Skills. Evaluation methods to select the equipment that is most effective and preparations of procurement forms.

- 803-6.2.7 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.

Requisite Knowledge. Statistical evaluation procedures and agency goals.

- 1) Statistical evaluation procedures
 - a) Agency needs analysis
 - b) Data analysis
 - c) Elimination of bias
 - d) Control of variables
 - e) Qualitative data
 - f) Quantitative data

- 2) Agency goals

Requisite Skills. Presentation skills and report preparation following agency guidelines.

803-6.3 **Instructional Development**

- 803-6.3.1 **Definition of Duty.** Plans, develops, and implements comprehensive programs and curricula.

- 803-6.3.2 Conduct an agency needs analysis, given agency goals, so that instructional needs are identified **and solutions are recommended.**

Requisite Knowledge. Needs analysis, task analysis, development of JPRs, lesson planning, instructional methods **for classroom, training ground, and distance learning**, characteristics of adult learners, instructional media, curriculum development, and development of evaluation instruments.

- 1) Needs analysis
 - a) Organizational
 - b) Personnel
 - c) ADDIE model
 - i) Analyze
 - ii) Design
 - iii) Develop

- iv) Implement
- v) Evaluate

2) Task analysis

a) Formal methods

- i) Carefully designed and executed surveys
- ii) Opinion polls
- iii) Checklists
- iv) Observations
- v) Psychological profiles
- vi) Research analyses
- vii) tests

b) Informal methods

- i) Conversations
- ii) Casual observations of activities and habits
- iii) Other unobtrusive measures

3) Development of JPRs

- a) Task to be performed
- b) Tools, equipment, or materials that should be provided to successfully complete the task
- c) Evaluation parameters and/or performance outcomes
- d) Requisite knowledge
- e) Requisite skills

4) Lesson planning

- a) Considerations from the training curriculum and program management perspective
- b) Impact of lesson planning on curriculum development
 - i) Fiscal impact
 - ii) Performance impact

5) Instructional methods for classroom, training ground, and distance learning

- a) Considerations from the training curriculum and program management perspective
- b) Impact of various instructional methods on curriculum development
 - i) Fiscal impact
 - ii) Performance impact

6) Characteristics of adult learners

- a) Considerations from the training curriculum and program management perspective
- b) Impact of adult learner characteristics on curriculum development
 - i) Fiscal impact

- ii) Performance impact
- 7) Instructional media
 - a) Impact of instructional media on curriculum development
 - i) Fiscal impact
 - ii) Performance impact
- 8) Curriculum development
 - a) Converting JPRs into instructional objectives to clarify performance expectations
 - i) Designate or develop reference material
 - ii) Knowledge objectives
 - iii) Skill objectives
 - (1) Skills checklist
- 9) Development of evaluation instruments
 - a) Considerations from the training curriculum and program management perspective
 - b) Impact of evaluation instruments on curriculum development
 - i) Fiscal impact
 - ii) Performance impact

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

803-6.3.3 Design programs or curricula, 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.

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

- 1) Instructional design
 - a) Systematic approach to the development of a program to meet instructional needs and goals
- 2) Adult learning principles
 - a) Characteristics of adult learners (Malcolm Knowles)
 - i) Autonomous and self-directed
 - ii) Personal experience and knowledge
 - iii) Goal oriented
 - iv) Relevancy oriented

- v) Practical
 - vi) Need for respect
- b) Application of adult learning principles
- 3) Principles of performance-based education
 - a) Measures achievement of objectives by performing actions
 - b) Components of performance-based education
 - i) Curriculum
 - ii) Instructional material
 - iii) Student assessment
 - iv) Instructional practice
 - v) Student/system accountability
- 4) Research
 - a) Choose topic
 - b) Organize topic into specific items
 - c) Identify research sources
 - d) Collect and review information
 - e) Process or prepare information to support instruction needs
 - f) Refresh information as needed
- 5) Fire service terminology
 - a) Utilize common fire service terminology

Requisite Skills. Technical writing and selecting course reference materials.

- 803-6.3.4 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.

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

- 1) Instructional design (modification from the training curriculum and program management perspective)
 - a) Systematic approach to the development of a program to meet instructional needs and goals
- 2) Adult learning principles
 - a) Characteristics of adult learners (Malcolm Knowles)
 - i) Autonomous and self-directed
 - ii) Personal experience and knowledge

- iii) Goal oriented
 - iv) Relevancy oriented
 - v) Practical
 - vi) Need for respect
 - b) Application of adult learning principles
- 3) Principles of performance-based education
- a) Measures achievement of objectives by performing actions
 - b) Components of performance-based education
 - i) Curriculum
 - ii) Instructional material
 - iii) Student assessment
 - iv) Instructional practice
 - v) Student/system accountability
- 4) Research
- a) Choose topic
 - b) Organize topic into specific items
 - c) Identify research sources
 - d) Collect and review information
 - e) Process or prepare information to support instruction needs
 - f) Refresh information as needed
- 5) Fire service terminology
- a) Utilize common fire service terminology

Requisite Skills. Technical writing and selecting course reference materials.

803-6.3.5 Write program and course goals, given JPRs and needs analysis information, so that the goals are clear, concise, measurable, and correlate to agency goals.

Requisite Knowledge. Components and characteristics of goals, and correlation of JPRs to program and course goals.

- 1) Components and characteristics of goals
 - a) Goal theory
 - i) Specific better than vague
 - ii) Must be committed to goal
 - iii) Must be challenging but attainable
 - b) Clear
 - c) Concise
 - d) Measurable
 - e) Correlated to agency goals

- f) Describes the desired outcome of a given course
- 2) Correlation of JPRs to program and course goals
 - a) Review needs analysis information
 - b) Identify program and course needs
 - c) Develop course goals to meet identified needs using the JPRs

Requisite Skills. Writing goal statements.

803-6.3.6 Write course objectives, given JPRs, so that objectives are clear, concise, measurable, and reflect specific tasks.

Requisite Knowledge. Components of objectives and correlation between JPRs and objectives.

- 1) Components of objectives
 - a) Audience (**may be implied**)
 - b) Behavior **statement**
 - c) Conditions **description**
 - d) Degree (**standards criteria**)
- 2) Correlation between JPRs and objectives
 - a) Develop course objectives to meet course goals using the JPRs

Requisite Skills. Writing course objectives and correlating them to JPRs.

803-6.3.7 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.

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

- 1) Correlation between course goals, course outline, objectives, JPRs, instructor lesson plans, and instructional methods
 - a) Develop course outline to meet course goals and objectives using JPRs
 - b) Develop course outline so that lesson plans may be created and instructional delivery methods identified

Requisite Skills. None required.

803-6.4 **Instructional Delivery**

No JPRs at the Instructor III Level.

803-6.5 **Evaluation and Testing**

803-6.5.1 **Definition of Duty.** Develops an evaluation plan; collects, analyses, and reports data; and utilizes data for program validation and student feedback.

803-6.5.2 Develop a system for the acquisition, storage, and dissemination of evaluation results, given agency goals and policies, so that the goals are supported and so that those affected by the information receive feedback consistent with agency policies and federal, state, and local laws.

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

- 1) Record-keeping systems
 - a) Electronic
 - b) Paper-based (hard copy)
- 2) Agency goals – AHJ
- 3) Data acquisition techniques
 - a) Electronic
 - b) Paper-based (hard copy)
- 4) Applicable laws
 - a) Federal
 - b) State
 - c) Local
- 5) Methods of providing feedback
 - a) Electronic paper-based (hard copy)
 - b) Verbal

Requisite Skills. The evaluation, development, and use of information systems.

803-6.5.3 Develop course evaluation plan, given course objectives and agency policies, so that objectives are measured and agency policies are followed.

Requisite Knowledge. Evaluation techniques, agency constraints, and resources.

- 1) Evaluation techniques
 - a) General areas of course evaluation
 - i) Reaction
 - ii) Knowledge
 - iii) Skills
 - iv) Attitudes
 - v) Transfer of learning
 - vi) results
 - b) Evaluation methods
 - i) Formative evaluation
 - ii) Field testing (Pilot program)
 - iii) Observation
 - (1) Learner responses
 - (2) Test results
 - c) Summative evaluation
 - i) End of course feedback
- 2) Agency constraints – AHJ
- 3) Resources
 - a) Human resources
 - b) Equipment

Requisite Skills. Decision making.

803-6.5.4 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.

Requisite Knowledge. Evaluation methods and agency goals.

- 1) Evaluation methods
 - a) General areas of program evaluation
 - i) Reaction
 - ii) Knowledge
 - iii) Skills
 - iv) Attitudes
 - v) Transfer of learning
 - vi) Results
 - b) Evaluation techniques
 - i) Formative evaluation
 - ii) Field testing (Pilot program)
 - iii) Observation
 - (1) Learner responses

- (2) Test results
- c) Summative evaluation
 - i) End of course feedback
 - (1) Student course evaluation
 - (2) Instructor evaluation
 - (3) Course component evaluation
 - (4) Facilities evaluation

2) Agency goals - AHJ

Requisite Skills. Construction of evaluation instruments.

803-6.5.5 **(This is the old 5.5.4) Analyze student evaluation instruments, given test data, objectives, and agency policies, so that validity is determined and necessary changes are accomplished made.**

Requisite Knowledge. Test validity, reliability, and item analysis.

1) **Test validity**

- a) **A valid test requires the learner to perform the same behavior under the same conditions specified in the instructional objective**
- b) **Match test item to the objective**
- c) **Test only skills that relate to the objective**
- d) **Test at proper learning level**
- e) **No tricks**
- f) **Subjects weighted and distributed properly**
- g) **Accurate predictor of field performance**

2) **Reliability**

- a) **A reliable test provides a consistent measure of a student's ability to demonstrate achievement of an objective**
- b) **Contains no clues**
- c) **Distractors are realistic**
- d) **Order of answers is random**
- e) **Is written clearly**
- f) **Uses negatives carefully**

3) **Item analysis**

- a) **Determine percentage of students who missed the question**
- b) **Determine why question was missed**
- c) **Revise question or instruction as necessary**

Requisite Skills. Item analysis techniques.

9. **Matters referred from the Fire Fighter Advisory Committee (FFAC), including but not limited to:**
 - C. **Report from the Curriculum and Testing Committee with discussion and possible action on recommendations with regards to the following:**
 - c. **Fire Officer III and IV reference lists**

REFERENCE LIST FOR THE FIRE OFFICER III CURRICULUM

Certified Training Facilities approved to teach this curriculum must have the following reference materials:

Required References:

Chief Officer (1st Ed)(2012). Burlington, MA: Jones and Bartlett Learning.

Chief Officer (2nd Ed) (2004). Stillwater, OK: International Fire Service Training Association

National Incident Management System: Principles and Practice (1st Ed) (2005) **(2nd Ed)(2012)**. Sudbury, MA: Jones and Bartlett Publishers, Inc.

NFPA 1021: Standard for Fire Officer Professional Qualifications (2009 Ed.). Quincy, MA: National Fire Protection Association. NFPA Publications

Officer Development Handbook (2nd Ed)(2010). Fairfax, VA: International Association of Fire Chiefs.

Standards Manual for Fire Protection Personnel Austin, TX: Texas Commission on Fire Protection.

Recommended References:

Chief Officer (1st Ed)(2012). Burlington, MA: Jones and Bartlett Learning.

Officer Development Handbook (2nd Ed)(2010). Fairfax, VA: International Association of Fire Chiefs.

Summary of changes:

The “required” and “recommended” designations were removed, and the two books listed under “recommended references” were lumped in with the rest of the books. In addition, the NIMS book was updated to the new second edition.

REFERENCE LIST FOR THE FIRE OFFICER IV CURRICULUM

Certified Training Facilities approved to teach this curriculum must have the following reference materials:

Required References:

Chief Officer (1st Ed)(2012). Burlington, MA: Jones and Bartlett Learning.

Chief Officer (2nd Ed) (2004). Stillwater, OK: International Fire Service Training Association

National Incident Management System: Principles and Practice (1st Ed) (2005) **(2nd Ed)(2012)**. Sudbury, MA: Jones and Bartlett Publishers, Inc.

NFPA 1021: Standard for Fire Officer Professional Qualifications (2009 Ed.). Quincy, MA: National Fire Protection Association. NFPA Publications

Officer Development Handbook (2nd Ed)(2010). Fairfax, VA: International Association of Fire Chiefs.

Standards Manual for Fire Protection Personnel Austin, TX: Texas Commission on Fire Protection.

Recommended References:

Chief Officer (1st Ed)(2012). Burlington, MA: Jones and Bartlett Learning.

Officer Development Handbook (2nd Ed)(2010). Fairfax, VA: International Association of Fire Chiefs.

Summary of changes:

The “required” and “recommended” designations were removed, and the two books listed under “recommended references” were lumped in with the rest of the books. In addition, the NIMS book was updated to the new second edition.

9. **Matters referred from the Fire Fighter Advisory Committee (FFAC), including but not limited to:**
 - C. **Report from the Curriculum and Testing Committee with discussion and possible action on recommendations with regards to the following:**
 - d. **Basic Wildland Fire Fighter reference list**

RECOMMENDED REFERENCE LIST FOR THE BASIC WILDLAND FIRE FIGHTER CURRICULUM

Certified Training Facilities approved to teach this curriculum must have the following reference materials:

Firefighter Training S-130, Instructor Guide (2003). Boise, ID: National Wildfire Coordinating Group. National Interagency Fire Center.

Firefighter Training S-130, Student Work Book (2003). Boise, ID: National Wildfire Coordinating Group. National Interagency Fire Center.

Fireline Handbook (March, 2004). Boise, ID: National Wildfire Coordinating Group. National Interagency Fire Center.

Incident Response Pocket Guide (IRPG) (2010). Boise, ID: National Wildfire Coordinating Group. National Interagency Fire Center.

Introduction to Wildland Fire Behavior S-190, Instructor Guide (March, 2006). Boise, ID: National Wildfire Coordinating Group. National Interagency Fire Center.

Introduction to Wildland Fire Behavior S-190, Student Work Book (March, 2006). Boise, ID: National Wildfire Coordinating Group. National Interagency Fire Center.

New Generation Fire Shelter (2003). [DVD] Boise, ID: National Wildfire Coordinating Group. National Interagency Fire Center.

As of 5/8/2013, there is a free version of this DVD available for viewing at the following web address: <http://www.youtube.com/watch?v=QJsY6foLh8o&list=SP3D911BCBF3DDF303>

NFPA 1051: Standard for Wildland Fire Fighter Professional Qualifications (2012 Ed.). Quincy, MA: National Fire Protection Association. NFPA Publications

Standards Manual for Fire Protection Personnel. Austin, TX: Texas Commission on Fire Protection.

9. **Matters referred from the Fire Fighter Advisory Committee (FFAC), including but not limited to:**
 - C. **Report from the Curriculum and Testing Committee with discussion and possible action on recommendations with regards to the following:**
 - e. **Intermediate Wildland Fire Fighter curriculum, outline, reference list and skill sheets**

RECOMMENDED REFERENCE LIST FOR THE INTERMEDIATE WILDLAND FIRE FIGHTER CURRICULUM

Certified Training Facilities approved to teach this curriculum must have the following reference materials:

Firefighter Training S-130, Instructor Guide (2003). Boise, ID: National Wildfire Coordinating Group. National Interagency Fire Center.

Firefighter Training S-130, Student Work Book (2003). Boise, ID: National Wildfire Coordinating Group. National Interagency Fire Center.

Fireline Handbook (March, 2004). Boise, ID: National Wildfire Coordinating Group. National Interagency Fire Center.

Incident Response Pocket Guide (IRPG) (2010). Boise, ID: National Wildfire Coordinating Group. National Interagency Fire Center.

NFPA 1051: Standard for Wildland Fire Fighter Professional Qualifications (2012 Ed.). Quincy, MA: National Fire Protection Association. NFPA Publications

Portable Pumps and Water Use, S-211, Student Work Book (2012). Boise, ID: National Wildfire Coordinating Group. National Interagency Fire Center.

Standards Manual for Fire Protection Personnel. Austin, TX: Texas Commission on Fire Protection.

Wildland Fire Chain Saws, S-212 Student Workbook (February, 2004). Boise, ID: National Wildfire Coordinating Group. National Interagency Fire Center.

Wildland Training for Structural Firefighters, G-131 (September 2008). Boise, ID: National Wildfire Coordinating Group. National Interagency Fire Center.

CHAPTER ELEVEN
INTERMEDIATE WILDLAND FIRE FIGHTER
CURRICULUM OUTLINE

SECTION	SUBJECT	RECOMMENDED HOURS
Intermediate Wildland Fire Fighter		
1102-6.1	General	2
1102-6.2	Human Resource Management	3
1102-6.3	Preparedness	3
1102-6.4	Mobilization	0
1102-6.5	Suppression	12
TOTAL RECOMMENDED HOURS		20

*The recommend hours total is based on a class of 12 students. Actual hours required will depend on the number of students, the number of examiners, availability of equipment, and the student skill level.

SECTION 1102
INTERMEDIATE WILDLAND FIRE FIGHTER

1102 – 6.1 General

1102-6.1.1 Prior to progressing to the Intermediate Wildland Fire Fighter level, the Basic Wildland Fire Fighter shall meet the JPRs defined in Sections 1102-6.1 through 1102-6.5

Requisite Knowledge. The Intermediate Wildland Fire Fighter role within the incident management system, basic map reading and compass use or other locating device, radio procedures, and record keeping.

1. The Intermediate Wildland Fire Fighter role within the incident management system
2. Basic map reading
3. Compass use or other locating device
4. Radio procedures
5. Record keeping

Requisite Skills. Orienteering and radio use.

1102-6.2 Human Resource Management

1102-6.2.1 Evaluate the readiness of assigned crew members, given a wildland fire, an assigned task, and agency equipment standards, so that crew members are equipped and supplied for suppression duties.

Requisite Knowledge. Agency standards and personnel inspection procedures.

1. Agency standards (AHJ)
2. Personnel inspection procedures
 - a. PPE
 - b. Tools
 - c. Supplies
 - d. Qualifications
 - e. Physical fitness level

Requisite Skills. Inspect members' personal protective equipment, tools, supplies, qualifications, and physical fitness level.

- 1102-6.2.2 Brief assigned personnel, given an assignment, supporting information, and equipment requirements, so that the personnel are informed of specific tasks, standards, safety, operational, and special interest area considerations.

Requisite Knowledge. Incident and task information necessary to carry out assignments.

1. Incident and task information necessary to carry out assignments
 - a. Briefing checklist
 - 1) Situation
 - 2) Mission/execution
 - 3) Communications
 - 4) Service/support
 - 5) Risk management
 - 6) Questions or concerns

Requisite Skills. Briefing skills.

- 1102-6.2.3 Lead wildland fire fighters in the performance of a task, given an assignment and performance standards, so that the task is safely completed within the standards in accordance with agency guidelines.

Requisite Knowledge. Leadership techniques for small groups.

1. Leadership techniques for small groups
 - a. Personnel safety
 - b. Timely completion of assigned tasks
 - c. Communication
 - 1) Face-to-face
 - 2) Radio
 - 3) Written

Requisite Skills. The application of requisite knowledge to lead wildland fire fighters to complete the task in a manner that is within the standard.

1102-6.3 Preparedness

1102-6.3.1 **Definition of Duty.** Responsibilities in advance of fire occurrence to ensure that tools, equipment, and supplies are fire ready.

1102-6.3.2 Maintain power tools and portable pumps, given agency maintenance specifications, supplies, and small tools, so that equipment is maintained and serviceable and defects are recognized and repaired.

Requisite Knowledge. Maintenance procedures for power tools and portable pumps.

1. Maintenance procedures for power tools – AHJ, per manufacturers' recommendations
2. Maintenance procedures for portable pumps – AHJ, per manufacturers' recommendations

Requisite Skills. Power tool and portable pump preventative maintenance and repair.

1102-6.3.3 Inspect tools and equipment, given agency specifications, so that availability of the tools and equipment for fire use is ensured.

Requisite Knowledge. Tool and equipment inspection guidelines.

1. Tool inspection guidelines – AHJ, per manufacturers' recommendations
2. Equipment inspection guidelines – AHJ, per manufacturers' recommendations

Requisite Skills. Ability to inspect the tools and equipment according to guidelines.

1102-6.4 **Mobilization.** No JPRs at this level.

1102-6.5 **Suppression**

1102-6.5.1 **Definition of Duty.** All activities to contain and extinguish a wildland or wildland/urban interface fire beginning with dispatch.

1102-6.5.2 Select fireline construction methods, given a wildland fire and line construction standards, so that the technique used is compatible with the conditions and meets agency standards.

Requisite Knowledge. Resource capabilities and limitations, fireline construction methods, and agency standards.

1. Resource capabilities
 - a. Resource type and kind
2. Resource limitations
3. Fireline construction methods
 - a. Hand crew
 - b. Dozer
 - c. Wet line
 - d. Foam
 - e. Retardant
4. Agency standards (AHJ)
5. IRPG downhill checklist

Requisite Skills. None specified.

- 1102-6.5.3 Effect the reduction of fire exposure to improved properties given a wildland or wildland/urban interface fire and available tools and equipment so that improvements are protected and the risk from fire is reduced.

Requisite Knowledge. Knowledge of fire behavior in both wildland and improved properties, and the effects of fuel modification to reduce the hazard.

1. Fire behavior in wildland and improved properties
 - a. Fuel
 - b. Weather
 - c. Topography
2. Effects of fuel modification to reduce the hazard
 - a. Fuel type
 - b. Fuel loading
 - c. Fuel moisture
 - d. Size and shape
 - e. Horizontal continuity
 - f. Vertical arrangement

Requisite Skills. The use of tools and equipment to protect the improved property.

- 1102-6.5.4 Operate a chain saw, given an assignment at a wildland fire and operational standards, so that the assignment is safely completed.

Requisite Knowledge. Agency operational standards for chainsaw operation and safety, tool selection, and personal protective equipment used during saw use.

1. Agency operational standards for chainsaw operation and safety (AHJ)
2. Agency operational standards for tool selection (AHJ)
3. Agency operational standards for personal protective equipment used during chain saw use (AHJ)

Requisite Skills. Site preparation, handling and cutting techniques, use of wedges, and saw and equipment transportation.

- 1102-6.5.5 Operate water delivery equipment, given an assignment at a wildland fire and operational standards, so that the proper equipment is selected, desired nozzle pressure is attained, and flow is maintained.

Requisite Knowledge. Basic hydraulics, pump and water delivery system capabilities, operation of pumps, basic drafting and associated equipment.

1. Basic hydraulics
2. Pump capabilities
3. Water delivery system capabilities
4. Operation of pumps
5. Basic drafting
6. Equipment associated with drafting

Requisite Skills. Placement, operation, and system setup.

- 1102-6.5.6 Secure the area of suspected fire origin and associated evidence, given a wildland fire and agency procedures, so that all evidence or potential evidence is protected from damage or destruction and reported to a supervisor.

Requisite Knowledge. Knowledge of types of evidence and the importance of site security and evidence preservation.

1. Knowledge of types of evidence
2. The importance of site security
3. The importance of evidence preservation

Requisite Skills. Evidence preservation techniques and use of marking devices for site security.

- 1102-6.5.7 Serve as a lookout, given an assignment at a wildland fire as per agency procedures, so that fire fighters are updated or warned when conditions change.

Requisite Knowledge. Basic fire behavior and how to recognize hazardous situations, communications methods, equipment, and procedures.

1. Basic fire behavior
 - a. Fuel
 - b. Topography
 - c. Weather
2. How to recognize hazardous situations
 - a. Operational engagement (IRPG)
 - 1) Risk management
 - 2) LCES
 - 3) Look up, down and around
 - 4) Standard firefighting orders
 - 5) Watch out situations
 - 6) Common denominators of fire behavior on tragedy fires
 - 7) Common tactical hazards
 - 8) Safety zones
 - 9) Downhill checklist
 - 10) Wildland urban interface firefighting

3. Communications methods
 - a. Face-to-face
 - b. Radio
 - c. Written
4. Communications equipment (AHJ)
5. Communications procedures (AHJ)

Requisite Skills. The ability to accurately describe fire behavior and changes in fire behavior through verbal communication, hand signals, or use of communication equipment.

INSTRUCTION SHEET INTERMEDIATE WILDLAND FIRE FIGHTER PERFORMANCE SKILLS

Format

The Intermediate Wildland Fire Fighter performance skills are designed to meet both the NFPA and NWCG national standards. Therefore, this curriculum contains both “performance standards evaluations” and “task book skills.” The performance standards evaluations are designed for testing and demonstrating proficiency of the NFPA job performance requirements (JPRs). The task book skills are designed to meet the requirements of the NWCG Position Task Book for FFT1/ICT5.

Performance Standard Evaluations

The performance standard evaluation skill sheets are to be used to prepare and test the trainees according to TCFP rules for skills testing. The scoring method for the Intermediate Wildland Fire Fighter performance standard evaluation skill sheets is satisfactory (S) or unsatisfactory (U) for each grading criteria, and a Pass or Fail for the entire skill sheet. In order to successfully pass an Intermediate Wildland Fire Fighter performance standard evaluation, the Intermediate Wildland Fire Fighter trainee must receive satisfactory scores in all of the grading criteria. Any grading criteria marked unsatisfactory shall require the examiner to explain the reason for the failure in written form in the comments section of the skill sheet. Some of the performance standards evaluations can be used to document completion of task book skills. However, there are several remaining task book tasks which must be completed as described below.

Task Book Skills

The TCFP Intermediate Wildland Fire Fighter certification also requires the completion of the NWCG Position Task Book (PTB) for FFT1/ICT5 in addition to this curriculum. The PTB shall be completed as described in National Wildfire Coordinating Group (NWCG) Wildland Fire Qualification System Guide (310-1) and in the Texas Intrastate Fire Mutual Aid System (TIFMAS) Business Manual.

The NWCG Position Task Book for FFT1/ICT5 can be found on this web site:

<http://ticc.tamu.edu/Documents/IncidentResponse/TIFMAS/pms-311-14%20FFI-ICT5.pdf>

SKILL #1

Using Map and Compass (Orienteering)

Subject: General**Section 1102****NFPA 1051 6.1.1****Intermediate Wildland Firefighter****OBJECTIVE**

The Intermediate Wildland Fire Fighter trainee shall demonstrate proper orienteering skills by reading a map and using a compass.

INSTRUCTIONS - procedures for achieving the objective

Given a local topographical map and compass you will accurately navigate to assigned destination. You will begin on my instruction to start. The skill will end when you state to me the distance and bearing to your assigned destination. Do you understand these instructions?

EXAMINERS NOTE

The wildland firefighter trainee will not be allowed to review the performance steps at the time of testing.

The examiner must provide the wildland firefighter trainee with an assigned destination. Their current position is the starting point.

PREPARATION & EQUIPMENT

Map

Compass

SKILL #1
Using Map and Compass (Orienteering)

Candidate: _____ Notes: _____

Examiner: _____

School: _____

Test Site: _____

Intermediate Wildland Firefighter	<u>TEST</u>		<u>RETEST</u>	
SKILL #1	PASS	FAIL	PASS	FAIL
The Intermediate Wildland Fire Fighter trainee shall demonstrate proper orienteering skills by reading a map and using a compass.				
	S	U	S	U
a. Uses compass to point to true North				
b. Accurately orients map using compass, landmarks, topographical features, etc.				
c. Verifies location by comparing topographic features with map				
d. Accurately reads and identifies at least three map symbols and/or features				
e. Accurately computes distance and bearing				

Evaluator/Candidate Comments:

All steps of the skill objective are mandatory and must be scored as “Satisfactory” to pass the skill.

Certifying Examiner

Date

Overall Skill Sheet Score

Pass Fail

Re-Test Certifying Examiner

Date

Overall Skill Sheet Re-Test Score

Pass Fail

SKILL #2
Using a Radio

Subject: General

Section 1102

NFPA 1051 6.1.1

Intermediate Wildland Firefighter

OBJECTIVE

The Intermediate Wildland Fire Fighter trainee shall demonstrate the proper use of a portable radio.

INSTRUCTIONS - procedures for achieving the objective

Given a portable radio and an assigned channel you will demonstrate how to prepare the radio and transmit and receive messages. You will begin on my instruction to start. The skill will end when you state to me that you have completed all of the identified steps. Do you understand these instructions?

EXAMINERS NOTE

The wildland firefighter trainee will not be allowed to review the performance steps at the time of testing.

The examiner shall give the trainee an assigned channel before beginning the skill.

PREPARATION & EQUIPMENT

2 Portable Radios

SKILL #2
Using a Radio

Candidate: _____ Notes: _____

Examiner: _____

School: _____

Test Site: _____

Intermediate Wildland Firefighter	<u>TEST</u>		<u>RETEST</u>	
SKILL #2	PASS	FAIL	PASS	FAIL
The Intermediate Wildland Fire Fighter trainee shall demonstrate the proper use of a portable radio.				
	S	U	S	U
a. Prepares radio for use				
b. Selects proper channel				
c. Receives transmitted message				
d. Holds mic two to four inches from mouth				
e. Transmits using clear text				

Evaluator/Candidate Comments:

All steps of the skill objective are mandatory and must be scored as “Satisfactory” to pass the skill.

Certifying Examiner

Date

Overall Skill Sheet Score
Pass <input type="checkbox"/> Fail <input type="checkbox"/>
Overall Skill Sheet Re-Test Score
Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Re-Test Certifying Examiner

Date

SKILL #3

Evaluate Crew Members' Readiness

Subject: Human Resources Management**Section 1102****NFPA 1051 6.2.1****Intermediate Wildland Firefighter****OBJECTIVE**

Evaluate the readiness of assigned crew members, given a wildland fire, an assigned task, and agency equipment standards, so that crew members are equipped and supplied for suppression duties. (6.2.1)

INSTRUCTIONS - procedures for achieving the objective

Given a wildland fire, an assigned task, and agency equipment standards, you will evaluate the readiness of assigned crew members so that they are equipped and supplied for suppression duties. You will begin on my instruction to start. The skill will end when you state to me that you have completed all of the identified steps. Do you understand these instructions?

EXAMINERS NOTE

The wildland firefighter trainee will not be allowed to review the performance steps at the time of testing.

PREPARATION & EQUIPMENT

Equipment specific to the assigned task
Assignment specific PPE

SKILL #3
Evaluate Crew Members' Readiness

Candidate: _____ Notes: _____

Examiner: _____

School: _____

Test Site: _____

Intermediate Wildland Firefighter	<u>TEST</u>		<u>RETEST</u>	
SKILL #3	PASS	FAIL	PASS	FAIL
Evaluate the readiness of assigned crew members, given a wildland fire, an assigned task, and agency equipment standards, so that crew members are equipped and supplied for suppression duties. (6.2.1)				
	S	U	S	U
a. Inspects members' personal protective equipment				
b. Inspects members' tools				
c. Inspects members' supplies				
d. Inspects members' qualifications				
e. Evaluates members' physical fitness levels				
f. Performs skill in a safe and proficient manner				

Evaluator/Candidate Comments:

All steps of the skill objective are mandatory and must be scored as “Satisfactory” to pass the skill.

Certifying Examiner

Date

Overall Skill Sheet Score
Pass <input type="checkbox"/> Fail <input type="checkbox"/>
Overall Skill Sheet Re-Test Score
Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Re-Test Certifying Examiner

Date

SKILL #4

Briefing and Leading Personnel

Subject: Human Resource Management**Section 1102****NFPA 1051 6.2.2, 6.2.3****Intermediate Wildland Firefighter****OBJECTIVE**

Brief assigned personnel, given an assignment, supporting information, and equipment requirements, so that the personnel are informed of specific tasks, standards, safety, operational, and special interest area considerations. (6.2.2)

Lead wildland fire fighters in the performance of a task, given an assignment and performance standards, so that the task is safely completed within the standards in accordance with agency guidelines. (6.2.3)

INSTRUCTIONS - procedures for achieving the objective

Given an assignment, supporting information, equipment requirements and performance standards, you will brief assigned personnel utilizing the briefing checklist in the IRPG. Then you will lead assigned personnel so that the task is safely completed. You will begin on my instruction to start. The skill will end when you state to me that you have completed all of the identified steps. Do you understand these instructions?

EXAMINERS NOTE

The wildland firefighter trainee will not be allowed to review the performance steps at the time of testing.

PREPARATION & EQUIPMENT*IRPG*

Equipment specific to the assignment

Assignment specific PPE

SKILL #4

Briefing and Leading Personnel

Candidate: _____ Notes: _____

Examiner: _____

School: _____

Test Site: _____

Intermediate Wildland Firefighter	TEST		RETEST	
SKILL #4	PASS	FAIL	PASS	FAIL
Brief assigned personnel, given an assignment, supporting information, and equipment requirements, so that the personnel are informed of specific tasks, standards, safety, operational, and special interest area considerations. (6.2.2)				
Lead wildland fire fighters in the performance of a task, given an assignment and performance standards, so that the task is safely completed within the standards in accordance with agency guidelines. (6.2.3)				
	S	U	S	U
a. Includes situation				
b. Includes mission/execution				
c. Includes communications				
d. Includes service/support				
e. Includes risk management				
f. Includes questions or concerns				
g. Demonstrates proper briefing skills				
h. Demonstrates effective leadership skills				

Evaluator/Candidate Comments:

All steps of the skill objective are mandatory and must be scored as “Satisfactory” to pass the skill.

Certifying Examiner

Date

Overall Skill Sheet Score

Pass Fail

Re-Test Certifying Examiner

Date

Overall Skill Sheet Re-Test Score

Pass Fail

SKILL #5

Maintain Power Tools and Portable Pumps

Subject: Preparedness**Section 1102****NFPA 1051 6.3.2****Intermediate Wildland Firefighter****OBJECTIVE**

Maintain power tools and portable pumps, given agency maintenance specifications, supplies, and small tools, so that equipment is maintained and serviceable and defects are recognized and repaired. (6.3.2)

INSTRUCTIONS - procedures for achieving the objective

Given agency maintenance specifications, supplies, and small tools, you will maintain power tools and portable pumps so that equipment is maintained and serviceable and defects are recognized and repaired. You will begin on my instruction to start. The skill will end when you state to me that you have completed all of the identified steps. Do you understand these instructions?

EXAMINERS NOTE

The firefighter trainee will not be allowed to review the performance steps at the time of testing.

The examiner will provide the firefighter trainee with equipment that has defects that must be repaired. Examples include:

- Dull/chipped chain on saw
- Low fuel
- Low oil
- Pull cord worn/frayed

PREPARATION & EQUIPMENT

Power tools
Portable pumps
Small tools
Supplies
Eye protection

SKILL #5**Maintain Power Tools and Portable Pumps**

Candidate: _____ Notes: _____

Examiner: _____

School: _____

Test Site: _____

Intermediate Wildland Firefighter	TEST		RETEST	
SKILL #5	PASS	FAIL	PASS	FAIL
Maintain power tools and portable pumps, given agency maintenance specifications, supplies, and small tools, so that equipment is maintained and serviceable and defects are recognized and repaired. (6.3.2)				
Power Tool	S	U	S	U
a. Performed power tool maintenance safely and proficiently				
b. Recognized defects				
c. Performed repair(s) to power tool(s) safely and proficiently				
Portable Pump	S	U	S	U
a. Performed repair(s) to portable pump(s) safely and proficiently				
b. Recognized defects				
c. Performed portable pump maintenance safely and proficiently				

Evaluator/Candidate Comments:

All steps of the skill objective are mandatory and must be scored as “Satisfactory” to pass the skill.

Certifying Examiner

Date

Overall Skill Sheet Score
Pass <input type="checkbox"/> Fail <input type="checkbox"/>
Overall Skill Sheet Re-Test Score
Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Re-Test Certifying Examiner

Date

SKILL #6

Protect Improved Property

Subject: Suppression**Section 1102****NFPA 1051 6.5.3****Intermediate Wildland Firefighter****OBJECTIVE**

Effect the reduction of fire exposure to improved properties given a wildland or wildland/urban interface fire and available tools and equipment so that improvements are protected and the risk from fire is reduced. (6.5.3)

INSTRUCTIONS - procedures for achieving the objective

Given a wildland or urban/interface fire scenario and using the *IRPG* or *Fireline Handbook*, you will describe methods to reduce the threat of fire exposure to structures. You will begin on my instruction to start. The skill will end when you state to me that you have completed all of the identified steps. Do you understand these instructions?

EXAMINERS NOTE

The firefighter trainee will not be allowed to review the performance steps at the time of testing.

The wildland firefighter trainee shall be provided with a picture or video of a wildland or urban/interface with structures.

PREPARATION & EQUIPMENT

Picture or video scenario

IRPG

Fireline Handbook

SKILL #6
Protect Improved Property

Candidate: _____ Notes: _____

Examiner: _____

School: _____

Test Site: _____

Intermediate Wildland Firefighter	<u>TEST</u>		<u>RETEST</u>	
SKILL #6	PASS	FAIL	PASS	FAIL
Effect the reduction of fire exposure to improved properties given a wildland or wildland/urban interface fire and available tools and equipment so that improvements are protected and the risk from fire is reduced. (6.5.3)				
	S	U	S	U
a. Explains the importance of LCES				
b. Describes wildland structural triage				
c. Identifies and explains fuel removal and ladder fuels				
d. Discusses structural ignition factors				
e. Describes structural preparation for wildfire				
f. Describes the effective use of tools and equipment to protect the structure				

Evaluator/Candidate Comments:

All steps of the skill objective are mandatory and must be scored as “Satisfactory” to pass the skill.

Certifying Examiner

Date

Overall Skill Sheet Score
Pass <input type="checkbox"/> Fail <input type="checkbox"/>
Overall Skill Sheet Re-Test Score
Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Re-Test Certifying Examiner

Date

SKILL #7
Operate a Chainsaw

Subject: Preparedness

Section 1102

NFPA 1051 6.5.4, 6.3.3

Intermediate Wildland Firefighter

OBJECTIVE

Operate a chain saw, given an assignment at a wildland fire and operational standards, so that the assignment is safely completed. (6.5.4)

Inspect tools and equipment, given agency specifications, so that availability of the tools and equipment for fire use is ensured. (6.3.3)

INSTRUCTIONS - procedures for achieving the objective

Given a chain saw you will describe to me the proper procedures for inspecting, operating and transporting a chainsaw. You will begin on my instruction to start. The skill will end when you state to me that you have completed all of the identified steps. Do you understand these instructions?

EXAMINERS NOTE

The wildland firefighter trainee will not be allowed to review the performance steps at the time of testing.

The operation of the chainsaw for this skill is to be simulated.

PREPARATION & EQUIPMENT

Chain saw
Wedges

The wildland firefighter trainee shall accomplish the skill wearing "**FULL PROTECTIVE CLOTHING FOR WILDLAND FIREFIGHTERS**" as defined in the *Fireline Handbook* (Appendix A, p. 39) which includes hard hat, fire resistant shirt/pants or jump suit, 8" leather boots, leather gloves, fire shelter, hearing/eye protection.

SKILL #7
Operate a Chainsaw

Candidate: _____ Notes: _____

Examiner: _____

School: _____

Test Site: _____

Intermediate Wildland Firefighter	<u>TEST</u>		<u>RETEST</u>	
SKILL #7	PASS	FAIL	PASS	FAIL
Operate a chain saw, given an assignment at a wildland fire and operational standards, so that the assignment is safely completed. (6.5.4)				
Inspect tools and equipment, given agency specifications, so that availability of the tools and equipment for fire use is ensured. (6.3.3)				
	S	U	S	U
a. Inspects chainsaw according to local SOPs and/or manufacturer's guidelines				
b. Describes additional PPE for saw usage				
c. Describes how to properly prepare the site				
d. Describes how to safely and proficiently handle chainsaw				
e. Simulates proper cutting techniques				
f. Explains the proper use of wedges				
g. Transports saw and other equipment according to local SOPs				

Evaluator/Candidate Comments:

All steps of the skill objective are mandatory and must be scored as “Satisfactory” to pass the skill.

Certifying Examiner

Date

Overall Skill Sheet Score
Pass <input type="checkbox"/> Fail <input type="checkbox"/>
Overall Skill Sheet Re-Test Score
Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Re-Test Certifying Examiner

Date

SKILL #8

Operate Water Delivery Equipment

Subject: Suppression**Section 1102****NFPA 1051 6.5.5, 6.3.3****Intermediate Wildland Firefighter****OBJECTIVE**

Operate water delivery equipment, given an assignment at a wildland fire and operational standards, so that the proper equipment is selected, desired nozzle pressure is attained, and flow is maintained. (6.5.5)

Inspect tools and equipment, given agency specifications, so that availability of the tools and equipment for fire use is ensured. (6.3.3)

INSTRUCTIONS - procedures for achieving the objective

Given an assignment at a wildland fire, you will operate water delivery equipment so that the proper equipment is selected, desired nozzle pressure is attained, and flow is maintained. You will begin on my instruction to start. The skill will end when you state to me that you have completed all of the identified steps. Do you understand these instructions?

EXAMINERS NOTE

The wildland firefighter trainee will not be allowed to review the performance steps at the time of testing.

PREPARATION & EQUIPMENT

Water delivery equipment

Hose

Nozzle

The wildland firefighter trainee shall accomplish the skill wearing "**FULL PROTECTIVE CLOTHING FOR WILDLAND FIREFIGHTERS**" as defined in the *Fireline Handbook* (Appendix A, p. 39) which includes hard hat, fire resistant shirt/pants or jump suit, 8" leather boots, leather gloves, fire shelter, hearing/eye protection.

SKILL #8
Operate Water Delivery Equipment

Candidate: _____ Notes: _____

Examiner: _____

School: _____

Test Site: _____

Intermediate Wildland Firefighter	<u>TEST</u>		<u>RETEST</u>	
SKILL #8	PASS	FAIL	PASS	FAIL
Operate water delivery equipment, given an assignment at a wildland fire and operational standards, so that the proper equipment is selected, desired nozzle pressure is attained, and flow is maintained. (6.5.5)				
Inspect tools and equipment, given agency specifications, so that availability of the tools and equipment for fire use is ensured. (6.3.3)				
	S	U	S	U
a. Inspects equipment according to local SOPs and/or manufacturer's guidelines				
b. Demonstrates the correct placement and setup of water delivery system				
c. Attains desired nozzle pressure				
d. Maintains desired flow rate				
e. Operates system safely and proficiently				

Evaluator/Candidate Comments:

All steps of the skill objective are mandatory and must be scored as “Satisfactory” to pass the skill.

Certifying Examiner

Date

Overall Skill Sheet Score
Pass <input type="checkbox"/> Fail <input type="checkbox"/>
Overall Skill Sheet Re-Test Score
Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Re-Test Certifying Examiner

Date

SKILL #9

Evidence Preservation and Site Security

Subject: Suppression**Section 1102****NFPA 1051 6.5.6****Intermediate Wildland Firefighter****OBJECTIVE**

Secure the area of suspected fire origin and associated evidence, given a wildland fire and agency procedures, so that all evidence or potential evidence is protected from damage or destruction and reported to a supervisor.

INSTRUCTIONS - procedures for achieving the objective

Given a wildland fire and agency procedures, you will secure the area of suspected fire origin and associated evidence so that all evidence or potential evidence is protected from damage or destruction and reported to a supervisor. You will begin on my instruction to start. The skill will end when you state to me that you have completed all of the identified steps. Do you understand these instructions?

EXAMINERS NOTE

The wildland firefighter trainee will not be allowed to review the performance steps at the time of testing.

PREPARATION & EQUIPMENT

Marking devices (scene tape, traffic cones, etc.)
Simulated evidence

The wildland firefighter trainee shall accomplish the skill wearing "**FULL PROTECTIVE CLOTHING FOR WILDLAND FIREFIGHTERS**" as defined in the *Fireline Handbook* (Appendix A, p. 39) which includes hard hat, fire resistant shirt/pants or jump suit, 8" leather boots, leather gloves, fire shelter, hearing/eye protection.

SKILL #9
Evidence Preservation and Site Security

Candidate: _____ Notes: _____

Examiner: _____

School: _____

Test Site: _____

Intermediate Wildland Firefighter	<u>TEST</u>		<u>RETEST</u>	
SKILL #9	PASS	FAIL	PASS	FAIL
Secure the area of suspected fire origin and associated evidence, given a wildland fire and agency procedures, so that all evidence or potential evidence is protected from damage or destruction and reported to a supervisor. (6.5.6)				
	S	U	S	U
a. Protects evidence from damage or destruction				
b. Effectively uses marking devices for site security				
c. Reports potential evidence to supervisor				
d. Performs skill in a safe and proficient manner				

Evaluator/Candidate Comments:

All steps of the skill objective are mandatory and must be scored as “Satisfactory” to pass the skill.

Certifying Examiner

Date

Overall Skill Sheet Score
Pass <input type="checkbox"/> Fail <input type="checkbox"/>
Overall Skill Sheet Re-Test Score
Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Re-Test Certifying Examiner

Date

SKILL #10

Communicate Fire Behavior

Subject: Suppression**Section 1102****NFPA 1051 6.5.7****Intermediate Wildland Firefighter****OBJECTIVE**

Serve as a lookout, given an assignment at a wildland fire as per agency procedures, so that fire fighters are updated or warned when conditions change. (6.5.7)

INSTRUCTIONS - procedures for achieving the objective

Given an assignment at a wildland fire scenario, you will serve as a lookout so that fire fighters are updated or warned when conditions change. You will begin on my instruction to start. The skill will end when you state to me that you have completed all of the identified steps. Do you understand these instructions?

EXAMINERS NOTE

The wildland firefighter trainee will not be allowed to review the performance steps at the time of testing.

The wildland firefighter trainee shall be provided with a picture or video of a wildland or urban/interface fire and current weather conditions. In addition, the examiner shall provide a change in weather or fire conditions that necessitates the lookout to provide a warning.

PREPARATION & EQUIPMENT

Picture or video scenario

SKILL #10
Communicate Fire Behavior

Candidate: _____ Notes: _____

Examiner: _____

School: _____

Test Site: _____

Intermediate Wildland Firefighter	<u>TEST</u>		<u>RETEST</u>	
SKILL #10	PASS	FAIL	PASS	FAIL
Serve as a lookout, given an assignment at a wildland fire as per agency procedures, so that fire fighters are updated or warned when conditions change. (6.5.7)				
	S	U	S	U
a. Describes the responsibilities of a lookout				
b. Accurately describes current fire behavior				
c. Accurately describes change in fire behavior based on change in conditions				
d. Communicates changing conditions to fire fighters				

Evaluator/Candidate Comments:

All steps of the skill objective are mandatory and must be scored as “Satisfactory” to pass the skill.

Certifying Examiner

Date

Overall Skill Sheet Score
Pass <input type="checkbox"/> Fail <input type="checkbox"/>
Overall Skill Sheet Re-Test Score
Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Re-Test Certifying Examiner

Date

9. **Matters referred from the Fire Fighter Advisory Committee (FFAC), including but not limited to:**
 - C. **Report from the Curriculum and Testing Committee with discussion and possible action on recommendations with regards to the following:**
 - f. **HazMat Operations Mission-Specific Competencies, HazMat Technician and HazMat Incident Commander reference lists**

REFERENCE LIST FOR THE HAZARDOUS MATERIALS OPERATIONS - MISSION SPECIFIC COMPETENCIES CURRICULUM

This Reference List is provided as a general guide for both instructors and students to locate information pertaining to the specific objectives in the TCFP Curriculum. This list is **not** all-inclusive and does not in any way limit TCFP development and use of questions to test the objectives of the curriculum:

Required References

Texts

- Certification Curriculum Manual*. Texas Commission on Fire Protection. (Most current edition). Austin, TX: Texas Commission on Fire Protection.
- Code of Federal Regulations, Title 29 Part 1910.120, Appendix A*. United States. U.S. Department of Labor, Occupational Safety & Health Administration.
http://edocket.access.gpo.gov/cfr_2007/julqtr/pdf/29cfr1910.120.pdf
- Emergency Response Guidebook*. United States. (Most current edition). Washington, DC: U.S. Department of Transportation, Pipeline and Hazardous Materials Safety Administration.
- Essentials of Fire Fighting and Fire Department Operations*, 5th edition. International Fire Service Training Association. (2008). Stillwater, OK: Fire Protection Publications, Oklahoma State University.
- Fire Fighter's Handbook of Hazardous Materials*, 7th edition. Baker, Charles T., (2006). Sudbury, MA: Jones and Bartlett.
- Firefighter's Handbook: Essentials of Firefighting and Emergency Response*, 3rd edition. Delmar Publishers. (2008). Clifton Park, NY: Delmar, Cengage Learning.
- Fundamentals of Fire Fighter Skills*, 2nd edition. International Association of Fire Chiefs, & National Fire Protection Association. (2008). Sudbury, MA: Jones and Bartlett.
- Hazardous Materials Awareness and Operations*. DeBobes, L. J. (2009). Sudbury, MA: Jones & Bartlett.
- Hazardous Materials for First Responders*, 3rd edition. Adams, B., & Miller, L. A. (2004). Stillwater, OK: Fire Protection Publications, Oklahoma State University.
- Hazardous Materials: Managing the Incident*. Chester Noll, G. G., Hildebrand, M. S., & Yvorra, J. G. (2005). MD: Red Hat Publishing, Inc.
- Hazardous Materials/Weapons of Mass Destruction Response Handbook*, 5th edition. Trebisacci, D. G. (2008). Quincy, MA: National Fire Protection Association.
- NFPA 472: Standard for Professional Competence of Responders to Hazardous Materials Incidents*. (2008). Quincy, MA: NFPA Publications. National Fire Protection Association

NIOSH Pocket Guide to Chemical Hazards. National Institute for Occupational Safety and Health. (Most current edition). Cincinnati, OH: US Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health. <http://www.cdc.gov/niosh/npg/>

Standards Manual for Fire Protection Personnel. Texas Commission on Fire Protection. (Most current edition). Austin, TX: Texas Commission on Fire Protection.

Recommended References

The most current edition of the following publications and media are recommended (not required) supplemental material for program use.

Texts

Bretherick's Handbook of Reactive Chemical Hazards. Urben, P. G., Pitt, M. J., & Bretherick, L. (2007). Amsterdam: Elsevier.

Chlorine Emergencies: An Overview for First Responders. Chlorine Institute. (2007). Arlington, VA: The Chlorine Institute.

CHRIS: Chemical Hazards Response Information System. United States. (1992). COMDTINST, M16465.11B. Washington, DC: U.S. Dept. of Transportation, U.S. Coast Guard.

~~*Emergency Action Guides*. Association of American Railroads. (2006). Pueblo, CO: Association of American Railroads.~~

Emergency Care for Hazardous Materials Exposure. Currance, P., Bronstein, A. C., & Clements, B. (2005). St. Louis, MO: Mosby.

Emergency Handling of Hazardous Materials in Surface Transportation. Association of American Railroads. (2009). Washington, DC: Association of American Railroads.

Field Guide to Tank Car Identification. Association of American Railroads. (2009). Washington, DC: Association of American Railroads.

Fire Protection Guide to Hazardous Materials. National Fire Protection Association. (2001). Quincy, MA: National Fire Protection Association.

Hawley's Condensed Chemical Dictionary. Lewis, R. J., & Hawley, G. G. (2007). West Sussex: Wiley.

Hazardous Materials Air Monitoring and Detection Devices. Hawley, C. (2002). Albany, NY: Delmar/Thomson Learning.

Hazardous Materials Field Guide, 2nd edition. Bevelacqua, A. S., & Stilp, R. H. (2007). Albany, NY: Delmar Publications.

Hazardous Materials: Managing the Incident Field Operations Guide. Chester Bevelacqua, A. S., Hildebrand, M. S., & Noll, G. G. (2005). MD: Red Hat Publishing, Inc.

How to Use the Chlorine Institute Emergency Kit "A" for 100 lb. and 150 lb. Chlorine Cylinders. Chlorine Institute. (1996). New York, NY: The Chlorine Institute.

How to Use the Chlorine Institute Emergency Kit "B" for Chlorine Ton Containers. Chlorine Institute. (1988). New York, NY: The Chlorine Institute.

How to Use the Chlorine Institute Emergency Kit "C" for Chlorine Tank Cars and Tank Trucks. Chlorine Institute. (1993). New York, NY: The Chlorine Institute.

Symbol Seeker: Hazard Identification Manual. Burns, P. P. (2002). Preston, England: Symbol Seeker.

Media

Hazardous Materials Containment Series. Action Training Systems. [4 Disc DVD Set] Hazardous materials containment - series of 4 titles. Seattle, WA: Action Training Systems.

Hazardous Materials: Managing the Incident DVD Series. Massingham, G., Noll, G. G., Hildebrand, M. S., & Noll, G. G. (2005). [8 Disc DVD Set] Edgartown, MA: Emergency Film Group.

Summary of changes:

Emergency Action Guides has become unavailable due to discontinuation of the publication by the publisher.

REFERENCE LIST FOR THE HAZARDOUS MATERIALS TECHNICIAN CURRICULUM

This Reference List is provided as a general guide for both instructors and students to locate information pertaining to the specific objectives in the TCFP Curriculum. This list is **not** all-inclusive and does not in any way limit TCFP development and use of questions to test the objectives of the curriculum:

Required References

Texts

Certification Curriculum Manual. Texas Commission on Fire Protection. (Most current edition). Austin, TX: Texas Commission on Fire Protection.

Code of Federal Regulations, Title 29 Part 1910.120, Appendix A. United States. U.S. Department of Labor, Occupational Safety & Health Administration.
http://edocket.access.gpo.gov/cfr_2007/julqtr/pdf/29cfr1910.120.pdf

~~*Emergency Action Guides*. Association of American Railroads. (2006). Pueblo, CO: Association of American Railroads.~~

Emergency Response Guidebook. United States. (Most current edition). Washington, DC: U.S. Department of Transportation, Pipeline and Hazardous Materials Safety Administration.

Fire Fighter's Handbook of Hazardous Materials, 7th edition. Baker, Charles T., (2006). Sudbury, MA: Jones and Bartlett.

Hazardous Materials: Managing the Incident. Chester Noll, G. G., Hildebrand, M. S., & Yvorra, J. G. (2005). MD: Red Hat Publishing, Inc.

Hazardous Materials/Weapons of Mass Destruction Response Handbook Trebisacci, D. G. (2008). 5th edition. Quincy, MA: National Fire Protection Association.

NFPA 472: Standard for Professional Competence of Responders to Hazardous Materials Incidents. (2008 ed.). Quincy, MA: NFPA Publications. National Fire Protection Association

NIOSH Pocket Guide to Chemical Hazards. National Institute for Occupational Safety and Health. (Most current edition). Cincinnati, OH: US Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health.

Standards Manual for Fire Protection Personnel. Texas Commission on Fire Protection. (Most current edition). Austin, TX: Texas Commission on Fire Protection.

Recommended References

The most current edition of the following publications and media are recommended (not required) supplemental material for program use.

Texts

- Bretherick's Handbook of Reactive Chemical Hazards*. Urben, P. G., Pitt, M. J., & Bretherick, L. (2007). Amsterdam: Elsevier.
- Chlorine Emergencies: An Overview for First Responders*. Chlorine Institute. (2007). Arlington, VA: The Chlorine Institute.
- CHRIS: Chemical Hazards Response Information System*. United States. (1992). COMDTINST, M16465.11B. Washington, DC: U.S. Dept. of Transportation, U.S. Coast Guard.
- Dangerous Properties of Industrial and Consumer Chemicals*. New Cheremisinoff, N. P., King, J. A., & Boyko, R. (1994). York, NY: M. Dekker.
- Emergency Care for Hazardous Materials Exposure*. St. Currance, P., Bronstein, A. C., & Clements, B. (2005). Louis, MO: Mosby.
- Emergency Handling of Hazardous Materials in Surface Transportation*. Association of American Railroads. (2009). Washington, DC: Association of American Railroads.
- Field Guide to Tank Car Identification*. Association of American Railroads. (2009). Washington, DC: Association of American Railroads.
- Fire Protection Guide to Hazardous Materials*. National Fire Protection Association. (2001). Quincy, MA: National Fire Protection Association.
- Hawley's Condensed Chemical Dictionary*. Lewis, R. J., & Hawley, G. G. (2007). West Sussex, England: Wiley.
- Hazardous Materials Air Monitoring and Detection Devices*. Hawley, C. (2002). Albany, NY: Delmar/Thomson Learning.
- Hazardous Materials Field Guide*, 2nd edition. Bevelacqua, A. S., & Stilp, R. H. (2007). Albany, NY: Delmar Publications.
- Hazardous Materials: Managing the Incident Field Operations Guide*. Chester Bevelacqua, A. S., Hildebrand, M. S., & Noll, G. G. (2005). MD: Red Hat Publishing, Inc.
- How to Use the Chlorine Institute Emergency Kit "A" for 100 lb. and 150 lb. Chlorine Cylinders*. Chlorine Institute. (1996). New York, NY: The Chlorine Institute.
- How to Use the Chlorine Institute Emergency Kit "B" for Chlorine Ton Containers*. New Chlorine Institute. (1988). York, NY: The Chlorine Institute.
- How to Use the Chlorine Institute Emergency Kit "C" for Chlorine Tank Cars and Tank Trucks*. Chlorine Institute. (1993). New York, NY: The Chlorine Institute.
- Symbol Seeker: Hazard Identification Manual*. Burns, P. P. (2002). Preston, England: Symbol Seeker.

Media

Hazardous Materials Containment Series. Action Training Systems. [4 Disc DVD Set]
Hazardous materials containment - series of 4 titles. Seattle, WA: Action Training
Systems.

Hazardous Materials: Managing the Incident DVD Series. Massingham, G., Noll, G. G.,
Hildebrand, M. S., & Noll, G. G. (2005). [8 Disc DVD Set] Edgartown, MA: Emergency
Film Group.

Intermodal Containers. Noll, G. G., Hildebrand, M. S., & Donahue, M. L. (2002). [DVD]
Edgartown, MA: Emergency Film Group.

Petroleum Storage Tanks. Hildebrand, M. S., & Noll, G. G. (2003). [DVD] Edgartown, MA:
Emergency Film Group.

Summary of changes:

Emergency Action Guides has become unavailable due to discontinuation of the publication by
the publisher.

REFERENCE LIST FOR THE HAZARDOUS MATERIALS INCIDENT COMMANDER CURRICULUM

This Reference List is provided as a general guide for both instructors and students to locate information pertaining to the specific objectives in the TCFP Curriculum. This list is **not** all-inclusive and does not in any way limit TCFP development and use of questions to test the objectives of the curriculum:

Required References

Texts

Certification Curriculum Manual. Texas Commission on Fire Protection. (Most current edition). Austin, TX: Texas Commission on Fire Protection.

Code of Federal Regulations, Title 29 Part 1910.120, Appendix A. United States. U.S. Department of Labor, Occupational Safety & Health Administration.
http://edocket.access.gpo.gov/cfr_2007/julqtr/pdf/29cfr1910.120.pdf

~~*Emergency Action Guides.* Association of American Railroads. (2006). Pueblo, CO: Association of American Railroads.~~

Emergency Response Guidebook. United States. (Most current edition). Washington, DC: U.S. Department of Transportation, Pipeline and Hazardous Materials Safety Administration.

Fire Fighter's Handbook of Hazardous Materials, Baker, Charles T., 7th edition. (2006). Sudbury, MA: Jones and Bartlett.

Hazardous Materials: Managing the Incident. Chester Noll, G. G., Hildebrand, M. S., & Yvorra, J. G. (2005). MD: Red Hat Publishing Company, Inc.

Hazardous Materials/Weapons of Mass Destruction Response Handbook, 5th edition. Trebisacci, D. G. (2008). Quincy, MA: National Fire Protection Association.

NFPA 472: Standard for Professional Competence of Responders to Hazardous Materials Incidents. (2008 ed.). Quincy, MA: NFPA Publications. National Fire Protection Association

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Recommended References

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Fire Protection Guide to Hazardous Materials. National Fire Protection Association. (2001). Quincy, MA: National Fire Protection Association.

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Symbol Seeker: Hazard Identification Manual. Burns, P. P. (2002). Preston, England: Symbol Seeker.

Media

Hazardous Materials Containment Series. Action Training Systems. [4 Disc DVD Set]. Hazardous materials containment - series of 4 titles. Seattle, WA: Action Training Systems.

Hazardous Materials: Managing the Incident DVD Series. Massingham, G., Noll, G. G., Hildebrand, M. S., & Noll, G. G. (2005). [8 Disc DVD Set]. Edgartown, MA: Emergency Film Group.

Summary of changes:

Emergency Action Guides has become unavailable due to discontinuation of the publication by the publisher.

9. **Matters referred from the Fire Fighter Advisory Committee (FFAC), including but not limited to:**
 - C. **Report from the Curriculum and Testing Committee with discussion and possible action on recommendations with regards to the following:**
 - g. **Appointment of Head of a Fire Department Ad Hoc Advisory Committee**

Head of Department Ad Hoc Committee Recommendations

- Gary Wisdom
- Scott Kerwood
- Harold (Buddy) Rice
- Jimmy Chew
- Michael Brock
- Daniel Kistner
- Pat McAuliff (Chair, Curriculum & Testing committee)
- Jason Collier (Fire Fighter Advisory Committee Liaison to Curriculum & Testing committee)