University of Illinois Fire Service Institute

Course Syllabus

Course Title: Smoke Divers

Course Duration: 24 hours

Program: Firefighting Program

Course Prerequisites: Basic Operations Firefighter certification or Firefighter II certification

Course Description:
Smoke Divers is a 24-hour class where the student will walk away with increased confidence and knowledge of their SCBA. Firefighters will benefit from the course as they will become more aware of how the SCBA can perform and function through various drills that require donning, doffing, shifting, and dumping. Smoke and live fire scenarios challenge the student further by integrating the fireground tasks of forcible entry, rescue, search, and RIT basics. All of these basic to advanced skills build upon the students' abilities with their SCBA in order to give them the tools necessary for air management and self-rescue if the need arises.

Course Requirements:

       Pre-Course Work -- None
       Course Work – None
       Post-Course Work – None

Course Policies:

Safety Policy: Students shall understand and follow all instructions pertaining to operational safety, as stated by instructors or as written in course materials. Instructors and students shall be mindful of safety at all times. Conduct judged to be unsafe shall be grounds for dismissal from the course.

Academic Integrity Policy: IFSI has the responsibility for maintaining academic integrity so as to protect the quality of the education provided through its courses, and to protect those who depend upon our integrity. It is the responsibility of the student to refrain from infractions of academic integrity, from conduct that may lead to suspicion of such infractions, and from conduct that aids others in such infractions. Any violation of the code of conduct is grounds for immediate dismissal from the course.

American Disabilities Act: As guaranteed in the Vocational Rehabilitation Act and in the American Disabilities Act, if any student needs special accommodations, they are to notify their instructor and provide documentation as

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soon as possible so arrangements can be made to provide for the student's needs. If arrangements cannot be made at the class site, the student will test at an alternative time and place where the special accommodations can be made.

Course Content:

Module: 1
Title: Introduction to Smoke Divers
Terminal Learning Objective:
At the conclusion of this module, the student will assess their SCBA use procedures and its correlation to NFPA standards.

Module: 2
Title: Basic SCBA
Terminal Learning Objective:
At the conclusion of this module, the student will identify the SCBA's components and operation.

Module: 3
Title: SCBA Maneuvers
Terminal Learning Objective:
At the conclusion of this module, the student will perform a combination of SCBA maneuvers to negotiate a variety of obstacles without hesitation as presented in class.

Module: 4
Title: Forcible Entry
Terminal Learning Objective:
At the conclusion of this module, the student will force an inward and outward swinging door, as well as force 4x4s.

Module: 5
Title: SCBA Malfunctions
Terminal Learning Objective:
At the conclusion of this module, the student will demonstrate methods to mitigate a malfunctioning SCBA emergency.

Module: 6
Title: Air Conservation
Terminal Learning Objective:
At the conclusion of this module, the student will perform air conservation techniques as demonstrated in class.

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Module: 7
Title: Low Air Emergencies
<u>Terminal Learning Objective</u>:
At the conclusion of this module, the student will demonstrate various techniques to resolve a low air emergency.

Module: 8
Title: Bailouts
<u>Terminal Learning Objective</u>:
At the conclusion of this module, the student will demonstrate bailing out in an emergency scenario.

Module: 9
Title: SCBA Emergency Case Study
<u>Terminal Learning Objective</u>:
At the conclusion of this module, the student will identify significant factors that contributed to the SCBA emergency and/or firefighter(s) death.

Reference List:

Firefighter Mayday Conference-Belgium 2018

Firefighter Rescue and Survival (Kolomay & Hoff, 2003).

Fire Service Rapid Intervention Crews (Nedder, 2015).

IFSTA, Firefighting Essentials, 2018, 7th Edition.

Illinois Fire Service Institute Basic Firefighter/NFPA Firefighter I Curriculum.

Multi-Agency Serious Accident Review Team. *Library Incident Investigation Report: Porterville Fire Department.* April 12, 2021.

NFPA 1001 Standard for Fire Fighter Professional Qualifications, 2019 Edition.

NFPA 1404, Standard for Fire Service Respiratory Protection Training, 2018 Edition.

NFPA 1981, Standard for Open-Circuit Self-Contained Breathing Apparatus for Emergency Services, 2019 Edition.

Recommended Reading List:
None

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Course Schedule

DAY ONE

Event	Duration
Event	**Duration**
Module 1 – Introduction to Smoke Divers	1 Hour
Module 2 – Basic SCBA	15 Minutes
Drill 1 – Over the Head	15 Minutes
Drill 2 – Coat Swing	15 Minutes
Module 3 – SCBA Manuevers	
Drill 4 Restricted Area Techniques	30 Minutes
Drill 5 SCBA Familiarity	45 Minutes
Drill 6 Demo Frame Stations	1 Hour
Module 5 – SCBA Malfunctions	
Drill 3 Emergency Procedures	15 Minutes
Lunch	
Drill 7 Last Resort Techniques	1 Hour
Module 4 – Forcible Entry	
Drill 10 Forcible Entry	45 Minutes
Drill 8 SCBA Props	45 Minutes
Module 6 – Air Conservation	
Drill 9 Triangle Breathing	45 Minutes
Scenario 1 – Basic SCBA Maze	45 Minutes

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DAY TWO

Event	Duration
Black Sunday PPT	30 Minutes
Module 7 – Low Air Emergencies	
Drill 11-Alternate Air Techniques	30 Minutes
Drill 12 Nontoxic Bottle Change	30 Minutes
Drill 13-RIT pack	15 Minutes
Scenario 2-Taxpayer maze	1 Hour
Scenario 3-Victim Removal	1 Hour
Scenario 4-Hoseline	1 Hour
Lunch	
Module 8 - Bailouts	
Drill 14-Bailouts	1 Hour
Scenario 5-Tower Scenario	1 Hour
Scenario 6-Clark Scenario	1 Hour

DAY THREE

Event	Duration
Module 9 – SCBA Emergency Case Study	1 Hour
Scenario 7 – Spare Bottle Search	1 Hour 30 Minutes
Scenario 8 – Black Sunday	1 Hour 30 Minutes
Lunch	
Scenario 9-Final Practical	2 Hours
Cleanup	2 Hours