

COURSE OUTLINE

Surface Water Rescue

Course Description

FS 149. Surface Water Rescue. 1 hour credit. Prerequisite: FS 100 and FS 140 with a C or better. This course will enable the student to recognize conditions requiring a surface water rescue by meeting National Fire Protection Association's Standard 1670, pertaining to Surface Water Rescue. The student will also be capable of hazard recognition, equipment use, and techniques necessary to operate at a surface water rescue incident.

Course Relevance

This course is designed to meet the concepts covered in the National Fire Protection Association 1670, Standard on Operations and Training for Technical Search and Rescue Incidents. The student will learn successful water rescue techniques for employment in rescue and firefighting meeting the NFPA 1670 Standard Operations and Training Search and Rescue Incidents.

Required Materials

Smith, D.S., (1994). *Water rescue, basic skills for emergency responders*. St. Louis, MO: Mosby Year-Book, Inc.

Learning Outcomes

The intention is for the student to be able to

1. Identify procedures for initiating the emergency response system where surface water rescue is required
2. Identify procedures for carrying out site control and scene management
3. Recognize hazards associated with surface water rescue and the procedures to mitigate these hazards
4. Identify and utilize of personal protective equipment assigned for use at a surface water rescue incident

Primary Learning PACT Skills that will be DEVELOPED and/or documented in this course

Through the student's involvement in this course, he/she will develop his/her ability in the following primary PACT skill areas:

1. Teamwork
 - The student will learn to interact as part of an intricate team in executing surface water rescue techniques
2. Critical Thinking
 - The student critical and analytical skills through gathering data during an initial scene size up and determine the proper and safest course of action.

3. Field-Related Technology
 - The student will perform various surface water rescue skills and techniques.

Secondary skills (developed but not documented):

Problem Solving
Communication

Major Summative Assessment Task(s)

These learning outcomes and the primary Learning PACT skills will be demonstrated by

1. The student will perform a series of cognitive and psychomotor assessments to demonstrate their proficiency in surface water rescue techniques per the National Fire Protection Associations Standard 1670

Course Content

- I. Themes – Key recurring concepts that run throughout this course:
 - A. Site control and scene management
- II. Issues – Key areas of conflict that must be understood in order to achieve the intended outcome:
 - A. Personal, patient, and equipment safety
- III. Concepts – Key concepts that must be understood to address the issues:
 - A. Compliance with applicable safety standards
- IV. Skills/Competencies – Actions that are essential to achieve the course outcomes:
 - A. Recognition of the need for a water search and rescue
 - B. Identification of resources necessary to conduct safe and effective water operations
 - C. Demonstrate site control and site management measures
 - D. Identify general hazards associated with water operations and the procedures necessary to mitigate these hazards
 - E. Risk / benefit analysis

Learning Units

- I. Procedures for sizing up existing and potential conditions
 - A. Scope, magnitude, and nature of the incident
 - B. Location, number and condition of victims
 - C. Risk / benefit analysis
 - D. Access to the scene
 - E. Environmental factors
 - F. Available and necessary resources
- II. Personal safety at water operations
 - A. Personal flotation devices
 - B. Thermal protection
 - C. Appropriate head protection
 - D. Acceptable cutting devices
 - E. Contamination protection

- III. Conducting shore-base operations
 - A. Separate, isolate, secure, and interview of witnesses
 - B. Determine method of victim entrapment
 - C. Assess water conditions in terms of hazards to the victim
 - D. Throw bag operations
 - E. Rigging and mechanical advantage systems used in water operations
 - F. Survival swimming and self rescue
 - G. Victim packaging devices
 - H. Boat- assisted and boat based operations
 - I. Rapid extrication of accessible victims
 - J. Surface water-based search operations

- IV. Dive rescue operations
 - A. Unique hazard identification
 - B. Surface support operations
 - C. Support equipment utilized in dive rescue operations
 - D. Dive operations in various climates

- V. Ice operations
 - A. Ice operations hazard identification
 - B. Water and ice characteristics
 - C. Support equipment utilized in ice rescue operations
 - D. Deal with hypothermia
 - E. Self rescue

- VI. Surf rescue operation
 - A. Surf rescue operation hazard identification
 - B. Support equipment utilized in surf rescue operations

- VII. Swift water operations
 - A. Swift water rescue operation hazard identification
 - B. Victim entrapment
 - C. Zip lines
 - D. Self rescue

Learning Activities

Students will be engaged in both classroom interaction as well as field applications

Grade Determination

The student will be evaluated through written exams, skill proficiency assessments, and other methods of evaluation at the discretion of the instructor.