

**ILLINOIS OFFICE OF THE STATE FIRE MARSHAL
WATER RESCUE OPERATIONS
OBJECTIVES**

Orientation

- 66-1.1 Student shall identify the need for water search and rescue (9.2.3.1) (7.1.1)
- 66-1.2 Student shall identify the need for scene evaluation (9.2.3.2) (7.1.1)
- 66-1.3 Student shall identify the resources necessary to conduct safe and effective water operations (9.2.3.3)(9.3.5.1) (7.1.1)
- 66-1.4 Student shall identify the emergency response system for water incidents (9.2.3.4)(9.3.2.2) (7.1.1)
- 66-1.5 Student shall identify site control and scene management procedures (9.2.3.5)(9.3.5.4)(9.3.5.2)(9.3.5.6) (7.1.5)
- 66-1.6 Student shall identify general hazards associated with water incidents (9.2.3.6)(9.3.5.1) (7.1.1)
- 66-1.7 Student shall identify the procedures necessary to mitigate the general hazards associated with water incidents (9.2.3.6) (7.1.5)
- 66-1.8 Student shall identify Rescue vs. Recovery modes (9.2.3.7) (7.1.5)
- 66-1.9 Student shall identify Risk Benefit Analysis at the water incident (9.2.3.2) (9.2.3.7)(9.3.5.1)(9.3.5.6) (7.1.5)
- 66-1.10 Student shall identify the need for Risk Benefit Analysis at the water incident (9.2.3.7) (7.1.5)
- 66-1.11 Student shall identify victim packaging devices that could be employed by an organization for water rescue.(9.3.5.13) (7.1.11)
- 66-1.12 Student shall identify transferring victim information including location, surroundings, condition when found, present condition, and other pertinent information to emergency medical services personnel. (9.3.5.14) (7.1.11)

Dive

- 66-2.1 Student shall identify procedures for recognizing and mitigating hazards associated with dive operations (9.3.6.1)(9.3.6.7) (13.1.5)
- 66-2.2 Student shall identify procedures for identifying water characteristics found at dive sites including currents, ice and waves (9.3.6.3) (7.1.1)
- 66-2.3 Student shall identify procedures for operating surface support equipment used in water operations and serving as surface support personnel (9.3.6.2)(9.3.6.4)(9.3.5.2)(9.3.6.7) (13.1.2)
- 66-2.4 Student shall identify procedures for procuring the specialized equipment to perform dive operations (9.3.6.5) (13.1.2)
- 66-2.5 Student shall identify methods of safe entry and recovery of divers from the water (9.3.6.6) (13.1.2)

Ice

- 66-3.1 Student shall identify devices required to make a safe ice rescue by self rescue and reach method (9.3.7.3) (7.1.2)
- 66-3.2 Student shall identify devices required to make a safe ice rescue by throw method (9.3.7.3) (7.1.2)
- 66-3.3 Student shall identify personal protective equipment to be used during safe ice rescues (9.3.7.1) (7.1.2)
- 66-3.4 Student shall identify techniques, safety and emergency procedures used to conduct a safe ice rescue.(9.3.7.1)(9.3.5.11)(9.3.5.17) (7.1.4)
- 66-3.5 Student shall identify ice characteristics (9.3.7.2) (
- 66-3.6 Student shall identify hazards related to water and ice characteristics (9.3.7.2)
- 66-3.7 Student shall be able to identify a victim having a hypothermia crisis and determine the victim's ability to assist with their rescue (9.3.7.5)
- 66-3.8 Student shall be able to identify safe entry of divers into the water through an ice hole, if ice diving is performed by the organization (9.3.7.6)

- 66-3.9 Student shall be able to identify team equipment used for shore support (9.3.7.4)
- 66-3.10 Student shall be able to identify methods for cutting holes in the ice for divers. (9.3.7.6)
- 66-3.11 Student shall be able to identify the method for completing a pre-dive checklist for the divers (9.3.7.6)
- 66-3.12 Student shall be able to identify the method for removing a diver from the ice hole (9.3.7.6)

Surf

- 66-4.1 Student shall identify hazards specific to surf (9.3.8.1)
- 66-4.2 Student shall identify equipment needed to perform surf rescues (9.3.8.2) (7.1.2)
- 66-4.3 Student shall identify types of boat based operations for surf rescue (9.3.8.2)(9.3.5.10)(9.3.5.15)
- 66-4.4 Student shall identify scene size up and evaluation procedures (9.3.5.1) (7.1.1)
- 66-4.5 Student shall identify specifics towards managing surf hazards and the terrain/ one will encounter (9.3.8.1) (7.1.4)
- 66-4.6 Student shall identify self rescue and survival swimming techniques when in surf (9.3.8.4)

Swift Water

- 66-5.1 Student shall identify the characteristics, hazards and the velocity associated with swift water currents.(9.3.9.2.1) (7.1.1)
- 66-5.2 Student shall identify unique hazards found with flooding or swift water conditions.(9.3.9.2(1)) (7.1.1)
- 66-5.3 Student shall identify importance of Preplanning for swift water incidents. (9.3.9.2) (7.1.2)
- 66-5.4 Student shall identify resources available for response to a swift water incident. (9.3.9.2) (7.1.4)

- 66-5.5 Student shall identify topography / geographical features that could affect a swift water operation. (9.3.9.2(1)) (7.1.4)
- 66-5.6 Student shall identify the “International Scale of River Difficulty” rating system of rivers and rapids. (9.3.9.2(1))
- 66-5.7 Student shall identify the Swift Water Rescue Personal and Basic Team Equipment. (9.3.9.2)

Practical Objectives

- 66-6.1** Given a summary of the lesson plan, an appropriate drill site, rope and other support equipment, a simulated tethered diver, in accordance with all safety standards, and donned in the appropriate personal protective equipment, the student shall demonstrate the ability to effectively direct & control a tethered diver, given a tethered simulated diver on a line. The student shall complete this task with 100% accuracy.
- 66-6.2** Given a summary of the lesson plan, an appropriate drill site, the listed personal protective equipment, and in accordance with all safety standards, the student shall select the appropriate size and properly don the following water operations personal protective equipment. The student shall complete this task with 100 % accuracy.
- A. Thermal protection (per AHJ)**
 - B. Helmet**
 - C. Gloves**
 - D. Personal Flotation Device**
 - E. Cutting device**
 - F. Whistle**
- 66-6.3** Given a summary of the lesson plan, an appropriate drill site, a water rescue rope throw bag, in accordance with all safety standards, and donned in the appropriate personal protective equipment, the student shall demonstrate appropriate techniques for the following listed skills. The student shall complete this task with 100 % accuracy.
- A. Underhand deployment**
 - B. Overhand deployment**
 - C. Sidearm deployment**
 - D. Deployment while rescuer is moving**
 - E. Quick deployment**
 - F. Repacking of the water rescue rope throw bag**
- 66-6.4** Given a summary of the lesson plan, an appropriate sized swimming pool, a water rescue rope throw bag, a simulated rescuer, in accordance with all safety standards, and donned in the proper personal protective equipment, the student shall demonstrate self survival procedures to receive a water rescue rope throw bag. The student shall accomplish this task with 100% accuracy.
- 66-6.5** Given a summary of the lesson plan, an appropriate sized swimming pool, in accordance with all safety standards, and donned in the proper personal protective equipment, the student shall demonstrate

proper self survival swimming skills. The student shall complete this task with 100 % accuracy.

- 66-6.6** Given a summary of the lesson plan, an appropriate drill site, two appropriate anchor points, rope and other support equipment to establish a mechanical advantage system, a rescue team, in accordance with all safety standards, and donned in the proper personal protective equipment, the student shall demonstrate the construction of a tension diagonal system. The student shall accomplish this task with 100% accuracy.
- 66-6.7** Given a summary of the lesson plan, an appropriate sized swimming pool, a water craft, rope and other support equipment, a predetermined watercraft location, and a rescue team, in accordance with all safety standards, and donned in the proper personal protective equipment, the student shall demonstrate the proper techniques to direct a watercraft to a predetermined location using a shore based team. The student shall accomplish this task with 100% accuracy.
- 66-6.8** Given a summary of the lesson plan, an appropriate drill site, rope and other support equipment, appropriate weight to submerge a rope, a simulated victim, and a rescue team, in accordance with all safety standards, and donned in the proper personal protective equipment, the student shall demonstrate proper techniques to direct a shore based snag line system. The student shall accomplish this task with 100% accuracy.
- 66-6.9** Given a summary of the lesson plan, an appropriate sized swimming pool, a water craft, a simulated victim, two sections of 1” webbing of appropriate length, and a rescue team, in accordance with all safety standards, and donned in the proper personal protective equipment, the student shall demonstrate proper techniques to extricate an incapacitated victim from the water into a watercraft. The student shall accomplish this task with 100% accuracy.
- 66-6.10** Given a summary of the lesson plan, an appropriate drill site, the rapid field neuro check sheet, the rapid field neuro exam sheet, and in accordance with all safety standards, the student shall demonstrate the completion of a field neuro examination. The student shall accomplish this task with 100 % accuracy.

Practical

Objective: 66-6.1

Condition: Given a summary of the lesson plan, an appropriate drill site, rope and other support equipment, in accordance with all safety standards, and donned in the appropriate personal protective equipment.

Behavior: The student shall demonstrate the ability to effectively direct & control a tethered diver, given a tethered diver on a line.

Standard: The student shall complete this task with 100% accuracy.

Completed	Direct and control a tethered diver	Pass/Fail
	Review line signal communications with diver, prior to diver deployment	
	Directs the simulated tethered diver to the appropriate starting point	
	Communicates to the simulated tethered diver to start the search pattern using line signals and / or electronic communications	
	Maintains the integrity of the search pattern by communicating to the simulated tethered diver to keep the search line taut using line signals and / or electronic communications	
	Identifies each change of direction in the search pattern with a figure 8 on a bight knot in the search line	
	Identifies the object found with an additional figure 8 on a bight knot (two knots for found object)	
	Demonstrate line signal communications between tender and diver	

Evaluator's Signature

Student's Signature

Date

Practical

Objective: 66-6.2

Condition: **Given a summary of the lesson plan, an appropriate drill site, the listed personal protective equipment, and in accordance with all safety standards.**

Behavior: **The student shall select the appropriate size and properly don the following water operations personal protective equipment.**

Standard: **The student shall complete this task with 100 % accuracy.**

Completed	Personal Protective Equipment	Pass/Fail
	Select appropriate size and properly don thermal protection (per AHJ)	
	Select appropriate size and properly don a water rescue helmet	
	Select appropriate size and properly don water rescue gloves	
	Select appropriate size and properly don a personal flotation device	
	Demonstrate the location, deployment, and replacement of an appropriate water rescue cutting device	
	Demonstrate the location, deployment, activation, and replacement of an appropriate water rescue whistle	

Evaluator's Signature

Student's Signature

Date

Practical

Objective: 66-6.3

Condition: **Given a summary of the lesson plan, an appropriate drill site, a water rescue rope throw bag, in accordance with all safety standards, and donned in the appropriate personal protective equipment**

Behavior: **The student shall demonstrate appropriate techniques for the following listed skills.**

Standard: **The student shall complete this task with 100 % accuracy.**

Completed	Water Rescue Rope Throw Bag Deployment	Pass/Fail
	Demonstrate appropriate techniques for underhand deployment (preferred method)	
	Demonstrate appropriate techniques for overhand deployment	
	Demonstrate appropriate techniques for sidearm deployment	
	Demonstrate appropriate techniques for deploying a water rescue rope throw bag while the rescuer is moving	
	Demonstrate appropriate techniques for repacking a water rescue rope throw bag	
	Demonstrate appropriate techniques for a quick deployment of a water rescue throw bag	

Evaluator's Signature

Student's Signature

Date

Practical

Objective: 66-6.4

Condition: Given a summary of the lesson plan, an appropriate sized swimming pool, a water rescue rope throw bag, a simulated rescuer, in accordance with all safety standards, and donned in the proper personal protective equipment

Behavior: The student shall demonstrate self survival procedures to receive a water rescue rope throw bag.

Standard: The student shall complete this task with 100 % accuracy.

Completed	Receiving a Water Rescue Rope Throw Bag	Pass/Fail
	Demonstrate proper body position while in the water.	
	Demonstrate proper rope placement when rope is retrieved.	
	Demonstrate proper body angle to simulated water current when rope is firmly grasped.	
	Maintain proper body positioning throughout practical evolution.	

Evaluator's Signature

Student's Signature

Date

Practical

Objective: 66-6.5

Condition: **Given a summary of the lesson plan, an appropriate sized swimming pool, in accordance with all safety standards, and donned in the proper personal protective equipment**

Behavior: **The student shall demonstrate proper self survival swimming skills.**

Standard: **The student shall complete this task with 100 % accuracy.**

Completed	Self survival swimming skills	Pass/Fail
	Demonstrates limitations of PPE while in water.	
	Demonstrate ability to follow simple commands while in the water.	
	Demonstrate proper confidence wearing PFD while in water.	

Evaluator's Signature

Student's Signature

Date

Practical

Objective: 66-6.6

Condition: **Given a summary of the lesson plan, an appropriate drill site, two appropriate anchor points, rope and other support equipment to establish a mechanical advantage system, a rescue team, in accordance with all safety standards, and donned in the proper personal protective equipment**

Behavior: **The student shall demonstrate the construction of a tension diagonal system**

Standard: **The student shall complete this task with 100 % accuracy.**

Completed	Tension Diagonal	Pass/Fail
	Demonstrate proper line placement to shore.	
	Demonstrate proper anchoring of line.	
	Demonstrate proper tensioning of line with haul system.	
	Demonstrate proper line height to water for given situation.	

Evaluator's Signature

Student's Signature

Date

Practical

Objective: 66-6.7

Condition: Given a summary of the lesson plan, an appropriate sized swimming pool, a water craft, rope and other support equipment, a predetermined watercraft location, and a rescue team, in accordance with all safety standards, and donned in the proper personal protective equipment

Behavior: The student shall demonstrate the proper techniques to direct a watercraft to a predetermined location using a shore based team.

Standard: The student shall complete this task with 100 % accuracy.

Completed	Directing a Watercraft	Pass/Fail
	Ensures proper tether system is in place.	
	Ensures proper amount of personnel are in place, and are positioned correctly to move watercraft.	
	Demonstrate proper location to give hand signals.	
	Demonstrates proper hand signals to tether team.	
	Demonstrate proper movement of watercraft	

Evaluator's Signature

Student's Signature

Date

Practical

Objective: 66-6.8

Condition: Given a summary of the lesson plan, an appropriate drill site, rope and other support equipment, appropriate weight to submerge a rope, a simulated victim, and a rescue team, in accordance with all safety standards, and donned in the proper personal protective equipment

Behavior: The student shall demonstrate proper techniques to direct a shore based snag line system.

Standard: The student shall complete this task with 100 % accuracy.

Completed	Shore Based Snag Line	Pass/Fail
	Demonstrates proper assembly of equipment needed to perform snag line operation.	
	Demonstrate proper movement of snag line to remove victim from simulated entrapment.	

Evaluator's Signature

Student's Signature

Date

Practical

Objective: 66-6.9

Condition: **Given a summary of the lesson plan, an appropriate sized swimming pool, a water craft, a simulated victim, two sections of 1” webbing of appropriate length, and a rescue team, in accordance with all safety standards, and donned in the proper personal protective equipment**

Behavior: **The student shall demonstrate proper techniques to extricate an incapacitated victim from the water into a watercraft.**

Standard: **The student shall complete this task with 100 % accuracy.**

Completed	Extricate Incapacitated Victim into a Watercraft	Pass/Fail
	Demonstrate proper placement of victim next to watercraft.	
	Demonstrate proper placement of recovery system to victim.	
	Demonstrates proper balance in watercraft while moving victim into watercraft.	

Evaluator's Signature

Student's Signature

Date
