

7. Ice Diving Ops

7.1 Introduction

Diving under ice presents hazards not common to the emergency response diver and special training is required. The purpose of this course is to acquaint the diver with many of the hazards associated with ice diving and how to plan and execute an ice dive.

7.2 Who May Teach

An active ERDI Instructor that has been certified to teach this ops component.

7.3 Student to Instructor Ratio

Academic:

1. Unlimited, so long as adequate facilities, supplies and time are provided to ensure comprehensive and complete training of subject matter.

Open Water (ocean, lake, quarry, spring, river, or estuary):

1. A maximum of 2 students per ERDI Instructor.
2. It is the instructor's discretion to reduce this number as conditions dictate.

7.4 Student Prerequisites

1. ERD I or equivalent.
2. Minimum age 18.

7.5 Course Structure and Duration

Course Structure:

1. ERDI allows instructors to structure courses according to the number of students participating and their skill level.

Duration:

1. Classroom and briefing: Approximately 3 hours.
2. Open water dives (required): Two dives are required with complete briefs and debriefs by the instructor. Dive plan must include surface interval, max no-decompression time, etc. to be figured out and logged.

7.6 Administrative Requirements

Administrative Tasks:

1. Collect the course fees from all the students.
2. Ensure that the students have the required equipment.
3. Communicate the schedule to the students.
4. Have the students complete the:
 - a. *ERDI Liability Release and Express Assumption of Risk Form.*
 - b. *ERDI Medical Statement Form.*

Upon successful completion of the course the instructor must:

1. Issue the appropriate ERDI certification by submitting the ERDI Diver Registration form to ERDI Headquarters or registering the students online through member's area of the ERDI website.

7.7 Training Materials

Required Manuals:

Texts, other than ERDI manuals, used for ERDI Ops Components must be approved by ERDI Headquarters.

7.8 Required Equipment

1. Same equipment as required for ERD I.
2. Dry suit.
3. Regulator appropriate for the environment.
4. Harness.
5. Lines.
6. Lights (as required).
7. Cold weather surface support equipment.
8. Hole cutting equipment.

7.9 Approved Outline

Instructors may use any additional text or materials that they feel help present these topics. The following topics must be covered:

1. Effects of the Cold:
 - a. Physiological aspects of cold-water diving.
 - b. Emergency aspects of cold-water diving.
 - c. Special first aid for cold exposure.
2. Equipment for Ice Diving:
 - a. Harness.
 - b. Lines.
 - c. Dry suit.
 - d. Hole cutting equipment.
3. Surface Support Procedures:
 - a. Duties and responsibilities.
 - b. Hole cutting techniques.
 - c. Lines and securing.
 - d. Line tending.
 - e. Communications.
 - f. Signals.
 - g. Ice spokes.
 - h. Lost diver procedures.
 - i. Safety diver:
 - i. Equipment of the safety diver.
 - ii. Search and recovery trained.
 - iii. Broken line procedures.
4. Navigation.
5. Diving Lights and their Care.

7.10 Required Skill Performance and Graduation Requirements

Students are required to successfully complete the following:

1. Open Water Dive 1:
 - a. Review of scuba skills on land.
 - b. Test lights and equipment.
 - c. Set up shelter.

ERDI Standards and Procedures
Part 3: OPS Component Standards

- d. Cut hole in ice and secure.
 - e. Dive plan.
 - f. Descent and line considerations on land.
 - g. Line handling and short line signals on land.
 - h. Ten-minute familiarization.
 - i. Enter.
 - j. Each diver must rotate and practice both surface support and safety diver.
 - k. Exit.
 - l. Log dive.
2. Open Water Dive 2:
- a. Set-up and dive plan.
 - b. Enter.
 - c. Line handling and simulated lost diver procedures.
 - d. Fifteen-minute exploring under the ice.
 - e. Exit.
 - f. Log dive.