

17. Ice Diver

17.1 Introduction

Ice diving can be a serene and beautiful aspect of scuba diving. As a winter activity, ice diving offers the diver the opportunity to enjoy sport diving year-round. Diving under ice presents hazards not common to the open water 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.

17.2 Who May Teach

1. An active SDI Instructor or Assistant Instructor that has been certified to teach this specialty.
2. Proof of certification at the diver level is required to upgrade administratively or to take a specialty instructor course for this specialty.

17.3 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.

Confined Water (swimming pool-like conditions):

1. N/A.

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

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

17.4 Student Prerequisites

1. SDI Open Water Scuba Diver or equivalent.
2. Minimum age 18.

17.5 Course Structure and Duration

Open Water Execution:

1. Two dives are required with complete briefs and debriefs by the instructor.

2. The Dive plan must include surface interval, maximum no-decompression time, etc. to be figured out and logged.

Course Structure:

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

17.6 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. *SDI Liability Release and Express Assumption of Risk* Form
 - b. *SDI Medical Statement* Form.

Upon successful completion of the course the instructor must:

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

17.7 Required Equipment

1. Basic open water scuba equipment as described in section three of this manual.
2. Dry suit, recommended with prior certification required.
3. A Regulator tested at low temperature.
4. Harness.
5. Lines.
6. Lights, as required.
7. Cold weather surface support equipment.
8. Hole-cutting equipment.

17.8 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 for the safety diver.
 - ii. Search and Recovery trained.
 - j. Broken line procedures.
4. Navigation.
5. Diving Lights and Their Care.

17.9 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.
 - 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. e. Exit.
 - f. Log dive.