

## **4. Scuba Discovery**

### **4.1 Introduction**

This program is designed to give prospective students an introduction to scuba diving in a controlled environment under the direct supervision of an active SDI Professional.

### **4.2 Qualifications of Graduates**

Upon successful completion of this course, graduates may:

1. Dive under the direct supervision of an active instructor.
2. Enroll in a *SDI Open Water Scuba Diver Course*.

### **4.3 Who May Teach**

1. An active SDI Open Water Scuba Diver Instructor.
2. An active SDI Assistant Instructor that has completed the SDI Dive Experience Leader program (pool or confined water only)
3. An active SDI Divemaster that has completed the SDI Dive Experience Leader program (pool only)

### **4.4 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.

#### **Pool:**

1. A maximum of 6 students per certified SDI professional, or 8 per SDI Open Water Instructor with an active assistant

#### **Confined Water (swimming pool-like conditions):**

1. A maximum of 4 students per certified SDI professional, or 6 per SDI Open Water instructor with an active assistant; the certified professional must reduce this number as conditions dictate. See Environmental Factors Affecting Ratios at the end of this section.

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

1. A maximum of 4 students per SDI Open Water instructor; or 6 with an active assistant\*; the instructor must reduce this number as conditions dictate. See Environmental Factors Affecting Ratios at the end of this section.
2. A maximum of 2 divers under the age of 15 per SDI Open Water instructor on any open water dive; the instructor must reduce this number as conditions dictate. See Environmental Factors Affecting Ratios at the end of this section.

**\* In the event the instructor ascends with a diver, the assistant must make an immediate safe ascent with all remaining divers.**

### **Environmental Factors Affecting Ratios**

1. Full ratio, diver to professional, is based on ideal conditions:
  - a. All divers in full view
  - b. Surge is at a minimum.
  - c. Environmental features allow the professional(s) to see all divers
  - d. No current/flow
2. Ratio reduction is determined by:
  - a. Reduced visibility of less than approximately 5m/16 ft; must be able to always see the entirety of each diver during the dive.
  - b. Environmental features obstruct view or divers can be lost behind them
  - c. Strong current/flow or surge
3. Other factors that require ratio to be reduced:
  - a. Diving from a boat
  - b. Long surface swims during entries and exits
  - c. Large groups of divers – not associated with the training

### **4.5 Student Prerequisites**

1. Minimum age 18, 10 with parental consent.
2. Demonstrate comfort and adequate swimming skills.

### **4.6 Course Structure and Duration**

#### **Pool or Confined Water:**

1. Students must complete a minimum of 30 minutes in the pool or confined open water session prior to the open water dive.
2. Confined water session must be completed during daylight hours or under conditions that simulate daylight conditions.

**Open Water (Optional):**

1. Training depth must not exceed 9 metres / 30 feet.
2. All dives must be completed during daylight hours or under conditions that simulate daylight conditions.
3. Instructors are not allowed to carry any photo or video equipment while conducting open water dives.

**Course Structure:**

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

**Duration**

1. The suggested number of training hours is 2.

## **4.7 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 Scuba Discovery Pamphlet.*

**OR**

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

**Upon successful completion of the course the instructor must:**

1. Register the students online through the member's area of the SDI website.

## **4.8 Training Materials**

### **Required Materials:**

1. *SDI Scuba Discovery* Slates or Scuba Discovery eLearning.

### **Optional Materials:**

1. *SDI Scuba Discovery* Pamphlet.

## **4.9 Required Equipment**

Basic open water scuba equipment as described earlier in section two of this manual. The exception to this is a dive computer is not mandatory; however, a depth gauge is required.

## **4.10 Required Subject Areas**

Instructors must use the *SDI Scuba Discovery* Slates if participants have not completed the Scuba Discovery eLearning. Instructors can use any additional text or materials that they feel help present these topics.

The following topics must be covered during this course:

1. The Aquatic Environment:
  - a. Marine environment.
  - b. Marine life expected to encounter at local dive site.
2. Physics and Physiology:
  - a. Buoyancy.
  - b. Pressure.
  - c. Gas spaces:
    - i. Equalization techniques.
    - ii. Lung over-expansion problems.
  - d. Reason for breathing continuously while underwater.
3. Scuba Equipment Assembly:
  - a. Mask, fins, and snorkel.
  - b. Exposure protection:
    - i. Wetsuits.
  - c. Buoyancy compensator device (BCD).
  - d. Regulator:

- i. Primary regulator.
    - ii. Alternate air source.
  - e. Cylinders.
  - f. Weight Systems.
  - g. Underwater instruments.
    - i. Submersible pressure gauge.
    - ii. Dive computers.
    - iii. Depth gauges.
- 4. Communications:
  - a. Hand signals.
  - b. Buddy system.
  - c. Buddy separation.
- 5. Taking the SDI Open Water Scuba Diver Course.

#### ***4.11 Required Skill Performance and Graduation Requirements***

**Students are required to successfully complete the following skills in confined water:**

- 1. Weight system adjustment with proper weighting.
- 2. Pre-dive check of self and buddy.
- 3. Removal and replacement of weight system on the surface.
- 4. Ear clearing and equalization.
- 5. Mask clearing; partial and full at depth.
- 6. Buoyancy compensator device (BCD) use:
  - a. Inflation and deflation; both oral and power at the surface.
  - b. Inflation using low pressure inflator and deflation, at depth.
- 7. Buoyancy control:
  - a. Controlled descents.
  - b. Controlled ascents.
- 8. Regulator use:
  - a. Breathing, clearing, and recovery at the surface.
  - b. Breathing, clearing, and recovery at depth.

- 9. Underwater swimming; proper use of fins.
- 10. Computer use; use and reading of computer if worn by diver.
- 11. Use of gauges.
- 12. Communications:
  - a. Hand signals.
  - b. Buddy system.
  - c. Buddy separation.

**In order to complete this course, students must:**

Demonstrate mature and sound judgment concerning dive planning and execution.