

## 25. Underwater Navigation Diver

### 25.1 Introduction

This course is designed to give students a greater understanding and experience on how to properly navigate underwater using both natural and compass navigation.

### 25.2 Who May Teach

An active SDI Instructor that has been certified to teach this specialty

### 25.3 Student to Instructor Ratio

#### Academic

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

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

1. N/A

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

1. A maximum of 8 students per instructor; it is the instructor's discretion to reduce this number as conditions dictate
2. The instructor has the option of adding 2 more students with the assistance of an active assistant instructor or divemaster
3. The total number of students an instructor may have in the water is 12 with the assistance of 2 active assistant instructors or divemasters

### 25.4 Student Prerequisites

1. SDI Open Water Scuba Diver, SDI Junior Open Water Scuba Diver, or equivalent
2. Minimum age 18, 10 with parental consent

### 25.5 Course Structure and Duration

#### Open Water Execution

1. Two dives are required with complete briefs and debriefs by the instructor
2. 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

## 25.6 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 this specialty 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

## 25.7 Training Material

### Required Material:

1. *SDI Night and Navigation Student Manual and I.Q. Review or eLearning*
2. *SDI Night and Navigation Instructor Guide*
3. *SDI Night and Navigation Instructor Resource CD*

## 25.8 Required Equipment

Basic open water scuba equipment as described in section three of this manual.

## 25.9 Approved Outline

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

1. The Aquatic Environment
  - a. Vision
  - b. Light
  - c. Sound
  - d. Tides
  - e. Currents
  - f. Waves
  - g. Surge

2. Natural Navigation
  - a. Bottom contours
  - b. Depth
  - c. Amount of light
  - d. Surge
  - e. Currents
  - f. Underwater objects (rocks, wrecks, etc)
3. Compass
  - a. Types
  - b. Analog
  - c. Digital
  - d. Features
    - i. Lubber line
    - ii. Bezel
    - iii. Luminous dial
  - e. Use of compass
    - i. Out and back
    - ii. Squares
    - iii. Triangles
4. Estimating Distance Underwater
5. Kick cycles
6. Time

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

Students are required to successfully complete the following:

1. Open Water Dive 1
  - a. Skills are generally done with more success if practiced on the surface from shore. Using the shore or descent line as a starting / reference point makes keeping track of students easier
  - b. Plan dive
  - c. Enter water from boat or shore
  - d. Practice out and back technique on surface and underwater
  - e. Squares and triangles on surface
  - f. Perform square and triangle on bottom
  - g. Practice locating a fixed object underwater by triangulation at the surface
  - h. Ascend and exit

### 2. Open Water Dive 2

- a. This dive must be a relaxed practice session. Place objects or use existing underwater formations and set up an underwater course. Let the students try and find all the points based on the direction and distance you give them prior to the start of the dive.
- b. Plan dive and decide what the best pattern to use for dive site is
- c. Enter and descend
- d. Run desired dive pattern
- e. Enjoy the sites
- f. Ascend and exit