6. Altitude Diver

6.1 Introduction

The purpose of this course is to acquaint a diver with the necessary procedures and knowledge to safely dive at altitudes above sea level.

6.2 Who May Teach

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

6.3 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

6.4 Student Prerequisites

1. SDI Open Water Scuba Diver , SDI Junior Open Water Scuba Diver, or equivalent, or current enrollment in one of those courses
2. Minimum age of 18, 10 with parental consent

6.5 Course Structure and Duration

Open Water Execution

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

6.6 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

6.7 Required Equipment

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

6.8 Approved Outline

The following is the approved outline:

1. Why we do This Type of Diving?
2. Dive Tables as They Relate to Altitude Diving
    a. DCIEM Tables
    b. Bühlmann Tables
    c. Cross Corrections to United States Navy (USN) Tables
3. Computers
    a. Computer's capability and usage
4. Calculations Based on Cross Corrections to USN Tables
    a. Usage
        i. Actual depth of dive
        ii. Altitude of dive site
        iii. Ascent rate is adjusted
    b. Examples of problems
    c. Last dive and travel at higher altitudes
5. Correction of Depth Gauges and Computers
    a. Gauges designed for 1 atmosphere (ATM)
    b. Capillary depth gauge will reflect the actual depth
    c. If there is any doubt use measured down line
6. Hypoxia During Altitude Diving
7. Levels of Altitude:
    a. 300 metres / 1000 feet

b. 1200 metres / 4000 feet, etc

6.9 Required Skill Performance and Graduation Requirements

Although not desirable, the training sessions may be carried out at sea level for those students who may be too distant from high altitude dive sites. Students are required to successfully complete the following skills:

1. Open Water Dive 1
    a. Plan dive
    b. Students compute their no-decompression information
    c. Test and check all equipment, i.e. depth gauges and bottom timers/watches and computers
    d. Enter and descend
    e. Monitor depth and no-decompression time
    f. Ascend
    g. Log dive
2. Open Water Dive 2
    a. Descend
    b. Monitor depth/time on slate
    c. Compass usage
    d. Treasure hunt or some other activity for fun
    e. Ascend
    f. Log dive