

Introduction to Technical Diving Course

OVERVIEW

This course is designed to give the open water or advanced diver an opportunity to improve their skills, knowledge and equipment configuration, thereby increasing their safety and efficiency. Course is also intended to prepare the advanced diver for the rigors of technical diver training.

QUALIFICATIONS OF GRADUATES

Graduates are considered competent to enter into a NAUI Technical course as long as all other prerequisites are met. Course gives the open water recreational divers the ability to increase their confidence and skills while remaining within no-decompression limits and by utilizing streamlined and efficient equipment configurations, divers will have the freedom to improve their skills. These divers will be more skilled, aware and responsible. Improving non-technical skills and techniques and building diver confidence are the goals of the course.

PREREQUISITES FOR ENTERING THE COURSE

- Minimum age of 18.
- Minimum certification of NAUI Scuba Diver or equivalent.
- NAUI Nitrox Diver or equivalent.
- Proof of 25 logged with five dives on EANx.
- Must be able to meet NAUI swim requirements for scuba diver.

Lectures

- Classroom hours- five are estimated

Dives

- Open water dives- four. No dive is to exceed 60 fsw (18msw) in depth. Dives may be in single and/or double cylinder configuration with no overhead environments.

EQUIPMENT

- If EANx is used an oxygen analyzer (may be provided or rented for use during the course).
- Dive computers are allowed for use as depth gauges and as backup to waterproof tables and timing devices and for dive planning.
- Ascent line reel and lift bag, with a minimum of 50 lb. (23 kg) lift, for maximum planned depth.
- A minimum of one line cutting device
- Waterproof dive tables.
- Additional optional student diver equipment as required.

SKILL REQUIREMENTS

- The students are to analyze their own breathing as mixture and to plan and safely execute each dive. Dive planning shall include limits based on gas consumption, oxygen toxicity exposures and inert gas absorption for each dive and breathing gas mixture. Each diver is to demonstrate switching and isolating a malfunctioning regulator, first in confined water, and following adequate practice,

at a depth of 33 fsw (10 msw) or less, out of air sharing with five foot (1.5 meter) to eight foot (2.5 meter) hose through a simulated restriction, underwater navigation appropriate to the dive plan, and deployment of lift bag. Each diver shall participate in and demonstrate expertise in NAUI Technical Equipment Gear Configuration (NTEC). Each diver will also participate in a diver rescue simulation to include management of a diver experiencing oxygen toxicity underwater, and out of gas scenarios.

ACADEMIC REQUIREMENTS

- **Applied Sciences.** This is an introduction of the material covered in the NAUI Master Scuba Diver Course. Included are NAUI Reduced Gradient Bubble Model theory and tables, physics, physiology and medical aspects as applied to planned decompression diving, with special emphasis on mechanisms of bubble formation, a review of inert gas perfusion and diffusion, equivalent narcosis depth (END), advantages of oxygen enriched air mixes for decompression, oxygen toxicity, dive time management. Also to be covered is maximum operating depth mixture computations decompression options using EANx and oxygen. Dive planning considerations to include depth, time, gas mixture, simulated decompression, gas quantities, logistics and contingencies.
- **Applied skills.** This is an introduction of the skills demonstrated in NAUI Technical courses. Focus is to be on diver's proper buoyancy and trim. Propulsion techniques are introduced to include frog kick, modified flutter kick, helicopter turns and backdowns. Also included is NAUI Technical Equipment Configuration (NTEC), gear inspection, decompression systems utilized in technical dive team applications, and an introduction to overhead environment consideration. Also to be covered is an introduction to support team operations, simulated decompression, lift bag deployment and line reel use.