

## 2.1.1 Discover Diving

### 2.1.1.1 Program Outcomes

GUE's Discover Diving program is designed as an introduction for individuals with no previous scuba diving experience. This program does not result in certification but can serve as an introduction to the Recreational Supervised Diver course or as a standalone experience. Completion of this program does not qualify the participants to engage in recreational diving.

### 2.1.1.2 Prerequisites

Applicants for a Discover Diving program must:

- a. Submit a completed Discover Diving Registration Form to their instructor.
- b. Be physically and mentally fit.
- c. Be included in an insurance program that specifically covers diving emergencies.
- d. Obtain a physician's prior written authorization for use of prescription drugs, except for birth control, or for any medical condition that may pose a risk while diving.
- e. Be a minimum of 14 years of age. Documented parental or legal guardian consent must be submitted to the instructor when the participant is a minor.

### 2.1.1.3 Program Content

The Discover Diving program is normally conducted over one day. It requires a minimum of one in-water session and at least four hours of instruction, encompassing classroom lectures, land drills, and in-water work. Optional open water dives can be conducted at the instructor's discretion.

Activities in confined and open water may be conducted separately or combined, with skills initially introduced in shallow water before participants are taken into deeper water.

### 2.1.1.4 Discover Diving Specific Training Standards

- a. Student-to-instructor ratio is not to exceed 4:1 during land drills or surface exercises; it cannot exceed 2:1 during any in-water training.
- b. Can be run with one trainee
- c. All confined in-water activities must be directly supervised by a qualified GUE instructor or GUE assistant instructor who is solely responsible for determining a participant's capacity to participate in open water diving.
- d. All open water dives must be directly supervised by a GUE instructor.
- e. During open water dives, a GUE instructor must not engage in any activity other than the direct supervision of the participants.
- f. All in-water activities must be conducted in daylight conditions.
- g. All in-water skills must be introduced and practiced in confined water shallow enough for the participant to stand in, before progressing to deeper water. When water shallow enough to stand in is not available, the skills may be introduced and practiced from a device such as a descent line, bar, ladder, or platform. In such a scenario, the in-water ratio is reduced to 1:1 and the skills introduction must not be conducted deeper than 6 ft/2 m.
- h. Maximum depth of 30 ft/9 m
- i. No overhead diving

- j. All dives must be within minimum decompression limits (MDLs), i.e., no required stops.

#### **2.1.1.5 Required Training Materials**

GUE training materials and recommended reading as determined by the course study package provided by GUE via the Discover Diving instructor.

#### **2.1.1.6 Academic Topics**

- a. Overview of scuba diving and GUE organization
- b. Basic diving physics with emphasis on dive safety
  - i. Breathing underwater
  - ii. Equalization underwater
  - iii. Buoyancy and trim; ascending, descending, and moving underwater
  - iv. Underwater communication
  - v. Identification of local environmental hazards, e.g., marine life
- c. Overview and use of scuba diving equipment
- d. Importance of additional dive training
- e. Value of training with GUE

#### **2.1.1.7 Land Drills and Topics**

- a. Equipment fit and function
- b. Gas analysis
- c. Basic 5 scuba skills #1, #2, and #4
- d. Long hose donation to trainee performed by instructor where the trainee is the receiver
- e. SPG check

#### **2.1.1.8 Required Dive Skills and Drills**

Students must be able to demonstrate capacity in the following skills with each skill practiced in confined water before it is attempted in an open water setting.

##### **2.1.1.8.1 Surface Skills**

- a. Regulator breathing practice
- b. Basic 5 scuba skills #1, #2, and #4
- c. Long hose donation to trainee performed by instructor
- d. Buoyancy compensator (BC) operation practice

##### **2.1.1.8.2 Underwater Skills**

- a. Controlled descent
- b. Buoyancy and trim practice
- c. Propulsion practice
- d. Basic 5 scuba skills #1, #2, and #4
- e. Long hose donation to trainee performed by instructor
- f. SPG check
- g. Controlled ascent

#### **2.1.1.9 Equipment Requirements**

GUE single tank configuration as outlined in Appendix A, excluding:

- a. Wrist-mounted compass
- b. Backup mask
- c. At least one cutting device
- d. Wetnotes with pencils
- e. At least one surface marker buoy (SMB) with spool

Prior to the commencement of the class, students should consult with a GUE representative to verify equipment requirements and appropriateness of any selected equipment.

## Appendix A - GUE Base Equipment Configuration

The GUE base equipment configuration is comprised of:

- a. Tanks/cylinders: Students may use a single tank/cylinder with a single- or dual-outlet valve. Students may also use dual tanks/cylinders connected with a dual-outlet isolator manifold, which allows for the use of two first stages. Dual tanks/cylinders connected with a dual-outlet, non-isolator manifold can be used, but only in recreational (no decompression) diving, and are considered an alternative for a single tank/cylinder. Consult course-specific standards and your instructor to verify size requirements.
- b. Regulators:
  - i. Single tank: The first stage must supply a primary second stage via a 5 to 7 ft/1.5 to 2 m hose. A backup second stage must be necklaced and supplied via a short hose. The first stage must also supply an analog pressure gauge, inflation for the buoyancy compensator (BC), and (when applicable) inflation for a drysuit.
  - ii. Double tank: One first stage must supply a primary second stage via a 5 to 7 ft/1.5 to 2 m hose (7 ft/2 m hose is required for all cave classes), and inflation for the buoyancy compensator (BC). The other first stage must supply a necklaced backup second stage via a short hose, an analog pressure gauge, and (when applicable) inflation for a drysuit.
- c. Backplate system:
  - i. Is held to the diver by one continuous piece of webbing. This webbing is adjustable and uses a buckle to secure the system at the waist.
  - ii. A crotch strap is attached and looped through the waistband to prevent the system from riding up a diver's back.
  - iii. The continuous webbing must support five D-rings;
    - 1. The first placed at the left hip
    - 2. The second placed in line with a diver's right collarbone
    - 3. The third placed in line with the diver's left collarbone
    - 4. The fourth and fifth are placed on the front and back of the crotch strap when divers plan to use advanced equipment such as DPVs.
  - iv. The harness below the diver's arms has small restrictive bands to allow for the placement of backup lights. The webbing and system retains a minimalist approach.
- d. Buoyancy compensation device (BC):

- i. A diver's BC is back-mounted and minimalist in nature.
  - ii. It is free of extraneous strings, tabs, or other material.
  - iii. There are no restrictive bands or restrictive elastic affixed to the buoyancy cell.
  - iv. Wing size and shape is appropriate to the cylinder size(s) employed for training.
- e. At least one time/depth measuring device
- f. Wrist-mounted compass
- g. Mask and fins: Mask is low-volume; fins are rigid, non-split.
- h. Backup mask
- i. At least one cutting device
- j. Wetnotes with pencils
- k. Surface marker buoy (SMB) with spool: when required, the SMB should be appropriate for environmental conditions and deployed using a spool with at least 100 ft/30 m of line.
- l. Exposure suit appropriate for the duration of exposure

### Additional Course-Specific Equipment

- a. Where required, back gas and stage cylinders are marked in accordance with the GUE General Training Standards, Policies, and Procedures document and configured in line with GUE protocols.
- b. When drysuit inflation systems are applicable, they should be sized appropriately for the environment; small tanks are placed on the backplate with larger supplies affixed to the diver's left back gas tank.
- c. Underwater lights:
  - i. When required, backup lights should be powered by alkaline batteries (not rechargeable) and stowed on the D-rings at a diver's chest.
  - ii. Backup lights should have a minimal amount of protrusions and a single attachment at the rear.
  - iii. The primary light should consist of a rechargeable battery pack and be fitted with a Goodman-style light handle.
  - iv. When burn time requirements create the need for an external battery pack, it should reside in a canister mounted on the diver's right hip.
- d. Guideline devices, as required during cave diving activities:
  - i. A primary reel is required for all cave diving and provides a minimalist form factor with a handle designed to support a Goodman or "hands free" handle operation. The primary reel must contain at least 150 ft/45 m of line.
  - ii. A safety spool is required for each diver while cave diving and must contain at least 150 ft/45 m of line.
  - iii. A jump or gap spool is required during Cave 2 diving and must contain at least 75 ft/23 m of line.