3.1.1 Discover Diving

3.1.1.1 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 Open Water Diver course or as a standalone experience. Completion of this program does not qualify the participants to engage in recreational diving.

3.1.1.2 Prerequisites

Applicants for a Discover Diving program course must abide by Training Prerequisites (2.1.4.1), except:

a. Submit a completed Course Registration Form, Medical History Form, and Liability Release Form to GUE HQ.

Plus:

a. Submit a completed Discover Diving Registration Form to their instructor.
b. Be a minimum of 12 years of age. Documented parental or legal guardian consent must be submitted to GUE HQ when the participant is a minor.

3.1.1.3 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 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.

3.1.1.4 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 40 ft/12 m.
i. No overhead diving.
j. All dives must be within minimum decompression limits (MDLs), i.e., no required stops.

3.1.1.5 Required Training Materials

GUE training materials and recommended study as determined by the course study packet provided by GUE.

3.1.1.6 Academic Topics

a. Overview of scuba diving and the 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

3.1.1.7 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

3.1.1.8 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.

3.1.1.8.1 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
e. Drysuit, if used

3.1.1.8.2 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

3.1.1.9 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 at least one pencil
e. 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 the appropriateness of any selected equipment.

Appendix A - GUE 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 (minimum 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 at least one pencil
k. Exposure suit appropriate for the duration of exposure
l. Surface marker buoy (SMB) with spool: Where required, the SMB should be appropriate for environmental conditions and deployed using a spool with at least 100 ft/30 m of line.

The GUE PSCR configuration is comprised of:

a. GUE base equipment configuration (except Tanks/Cylinder)
b. One primary and two backup lights
c. A GUE-approved passive semi-closed circuit rebreather
d. Modified tank configuration as appropriate for use with a GUE-approved passive semi-closed circuit rebreather
e. Modified regulator configuration as appropriate for use with a GUE-approved passive semi-closed circuit rebreather

The GUE CCR configuration is comprised of:

a. GUE base equipment configuration (except Tanks/Cylinder)
b. One primary and two backup lights
c. A GUE-approved closed-circuit rebreather
    i. Where required, students must own a GUE-approved closed-circuit rebreather before attending the course; they can, however, use a rented or borrowed unit during the course.
    ii. The closed-circuit rebreather used by the student, with all associated components, must be fully functional (pass all tests on the rebreather pre-dive checklist) and serviced according to manufacturer specifications.
    iii. All oxygen sensors must be less than one year from manufacturing date.
    iv. Both the rebreather controller and SOLO board must be updated with the latest software and firmware versions published by the manufacturer.
d. Modified tank configuration as appropriate for use with a GUE-approved closed-circuit rebreather
e. Modified regulator configuration as appropriate for use with a GUE-approved closed-circuit rebreather
f. Spare parts and consumables, including one set of controller, HUD, and solenoid batteries; one oxygen sensor; and one DSV/BOV mouthpiece.
g. If using a drysuit inflation cylinder attached to the backplate, extended inflation cylinder straps need to be used to ensure that it does not interfere with or restrict the counterlung's function.

The GUE Sidemount configuration is comprised of:

a. GUE base equipment configuration (except Tank/cylinders, Regulators, Backplate, BC)

b. One primary and two backup lights
c. Tanks/cylinders: Students are required to use independent cylinders with single valves and without manifolds, which allow for the use of one first stage each. Stage cylinders with proper cylinder marking (2.2, e) will also be utilized.
d. Regulators: One of the second stages must be on a 7 ft/2 m hose. Both first stages must supply a pressure gauge and provide inflation for a drysuit (where applicable) and a wing.
e. Sidemount harness: A diver's sidemount setup should be back-mounted and minimalist in nature. Wing size and shape should be appropriate to the cylinder size(s) employed for training.

Additional Course-Specific Equipment

a. Where required, back gas and stage cylinders with proper cylinder marking (2.2, e) will also be utilized 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 left side of 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 (except when diving sidemount).
    ii. Backup lights should have a minimal amount of protrusions and a single attachment at the rear.
    iii. Backup lights should feature a twist-on/off switch for operation
    iv. The primary light should consist of a rechargeable battery pack and be fitted with a Goodman-style light handle.
    v. 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.
e. Where required, GUE-approved DPV must:
    i. Be a tow-behind style with adjustable speed and clutch mechanism.
    ii. Include an attached cord at the back with bolt snap to be clipped on the front crotch strap D-ring.
    i. Include a leash attached to the front to be used for towing.