## 2.1.3 Recreational Diver Level 1

#### 2.1.3.1 Course Outcomes

GUE's Recreational Diver Level 1 course is designed to provide non-divers with sufficient knowledge, skill, and experience to dive within the limits of similarly qualified scuba divers. Qualified GUE Recreational Diver Level 1 divers are able to dive under conditions equal to or better than those in which they were trained with appropriate surface support and with individuals holding the same or a higher level of certification while using nitrox 32 or air within minimum decompression limits.

The Recreational Diver Level 1 diver who has not yet reached the age of 15 years is required to dive under the direct supervision of an adult who has, as a minimum, an autonomous scuba diver certification.

#### 2.1.3.2 Prerequisites

Applicants for a Recreational Diver Level 1 course must:

- a. Submit a completed Course Registration Form, Medical History Form, and Liability Release Form to GUE HQ.
- b. Be included in an insurance program that specifically covers diving emergencies.
- c. Be physically and mentally fit.
- d. Be a nonsmoker.
- e. 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.
- f. Be a minimum of 14 years of age. Documented parental or legal guardian consent must be submitted to GUE HQ when the participant is a minor.

#### 2.1.3.3 Course Content

The Recreational Diver Level 1 course is normally conducted over five days. It requires a minimum of ten confined water sessions, six open water dives, and at least forty hours of instruction, encompassing classroom lectures, land drills, and in-water work.

At the instructor's discretion, Recreational Supervised Divers may have a portion of their training counted toward Recreational Diver Level 1 qualification if they wish to dive without leadership supervision.

#### 2.1.3.4 Recreational Diver Level 1 Specific Training Standards

- a. Student-to-instructor ratio is not to exceed 6:1 during land drills or surface exercises; it cannot exceed 3:1 during any in-water training.
- b. Can be run with one trainee
- c. All in-water activities must be conducted in daylight conditions.
- d. All in-water drills must be introduced in confined water.
- e. Maximum depth of 70 ft/21 m
- f. No overhead diving
- g. All dives must be within minimum decompression limits (MDLs), i.e., no required stops.

#### 2.1.3.5 Required Training Materials

GUE training materials and recommended reading as determined by the course study package received via online download after GUE course registration.

## 2.1.3.6 Academic Topics

- a. Introduction: GUE organization and course overview (objectives, limits, training requirements)
- b. Diving physics supporting knowledge and ability to safely manage:
  - i. Breathing underwater
  - ii. Equalization and avoidance of barotraumas including DCI
  - iii. Buoyancy, trim, and balance; ascending, descending, and underwater propulsion
- c. Physical and mental stress while diving
- d. Scuba diving equipment overview and operation
- e. Breathing gas dynamics
- f. Decompression theory, including decompression sickness (DCS, AGE)
- g. Planning, including gas management, dive preparation, and pre-dive evaluation
- h. Nitrox diving and importance of gas analysis
- i. Team diving and underwater communication
- j. Environmental considerations while diving
- k. Conservation-minded diving techniques

## 2.1.3.7 Land Drills and Topics

The following land drills must be used to familiarize students with important skills before they are practiced underwater.

- a. Equipment fit, assembly and disassembly
- b. Propulsion and maneuvering techniques
- c. Gas analysis
- d. GUE EDGE and pre-dive checks
- e. Basic 5 scuba skills
- f. SPG check
- g. S-drill
- h. Valve operation
- i. Connect and disconnect LP inflation hose from BC (and drysuit, if used)
- j. Oral inflation of BC
- k. SMB deployment utilizing a spool
- I. Basic compass navigation
- m. Basic 5 rescue skills

## 2.1.3.8 Required Dive Skills and Drills

Students must demonstrate competence in the following skills to be certified as a GUE Recreational Diver Level 1 diver:

- a. Must be able to swim at least 300 yds/275 m in less than 14 minutes without stopping. This test should be conducted in a swimsuit and, where necessary, appropriate thermal protection.
- b. Must be able to swim a distance of at least 50 ft/15 m on a breath hold while submerged.

- c. Demonstrate proficiency in safe diving techniques, including pre-dive preparation, inwater activity, and post-dive assessment.
- d. Demonstrate awareness of team member location and a concern for safety, responding quickly to visual indications and dive partner needs.
- e. Efficiently and comfortably demonstrate how to donate gas to an out-of-gas diver followed by an ascent to the surface utilizing minimum decompression ascent profile.
- f. Comfortably demonstrate at least two propulsion techniques that would be appropriate in delicate and/or silty environments.
- g. Demonstrate a safe and responsible demeanor throughout all training.
- h. Demonstrate good buoyancy and trim, i.e., approximate reference is a maximum of 30 degrees off horizontal while remaining within 5 ft/1.5 m of a target depth.
- i. Demonstrate proficiency in underwater communication.
- j. Demonstrate basic equipment proficiency and an understanding of the GUE equipment configuration.
- k. Demonstrate aptitude in the following open water skills: mask clearing, mask removal and replacement, regulator removal and exchange, long hose deployment.
- I. Demonstrate a comfortable demeanor while swimming without a mask in touch contact, followed by a switch to the backup mask.
- m. Demonstrate safe ascent and descent procedures.
- n. Demonstrate comprehension of the components necessary for a successful backward kick.
- o. Demonstrate proficiency in basic underwater compass navigation.
- p. Demonstrate proficiency in the Basic 5 rescue skills.
- q. Demonstrate reasonable proficiency in the ability to deploy a surface marker buoy while utilizing a spool.

## 2.1.3.9 Equipment Requirements

GUE base equipment configuration as outlined in Appendix A, plus:

a. Snorkel, simple in design, with no purge valves

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  $100 \, \text{ft/} 30 \, \text{m}$  of line.
- I. 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 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.
- 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.