

# GUE Cave I Course

The GUE Cave Level I course is the first in a series of three courses designed to develop cave diving proficiency. It is an intense diver education program that acquaints individuals with an understanding of the cave environment and an appreciation for the subtle dangers often associated with overhead diving. Training includes an emphasis on awareness, problem resolution, stress management, navigation and conservation. To qualify for this type of instruction participants do not need prior overhead training but must be proficient divers with advanced buoyancy control skills. Global Underwater Explorers does not assume that cave training is for everyone. In fact, only very capable divers, who are quite comfortable in the water, should consider this form of diving. Penetrations during this course reach approximately 600 feet.

GUE does not offer programs that instill only a minimum amount of specialty information, because these tend to leave participants on the edge of their experience level. For this reason, the GUE curriculum does not have a conventional introductory overhead program (e.g. a cavern program) but begins with Cave I. If divers are interested in an overview of overhead diving, before committing to the actual training and its associated costs, they are encouraged to contact a GUE representative to audit a portion of our Cave I course. If, however, one is interested in pursuing cave training, they should first consult a GUE representative to assess whether their experience level and preparedness is adequate to meet the challenges of the program. All participants must be dedicated, physically fit and highly motivated.

Please consult the Global Underwater Explorers training philosophy for important information applicable to all courses.

## B. A. Prerequisites

- I. Must be a minimum age of 18 years of age.
- 2. Must have a completed application packet on file including medical information, release forms and dive history.
- 3. Must have a minimum of 75 dives beyond open water qualification.
- 4. Must be physically fit, mentally stable and clearly focused.
- 5. Must be a nonsmoker.
- 6. Prior to the onset of diver training, the use of prescription drugs must be authorized by a physician and approved by a GUE representative.
- 7. Must submit a diving resume to headquarters via electronic or land mail.
- 8. Must be able to swim at least 300 yards in less than 12 minutes without stopping.
- 9. Must be able to swim a distance of at least 60 feet on a breath hold.

10. Must hold DAN Master level insurance or equivalent.

## B. Duration

The GUE Cave Level I class is structured around a minimum 40-hour, 5-day period consisting of at least I2 dives at a minimum of three different diving locations. At least eight of these dives will be beyond the daylight zone. GUE representatives may structure course time in many different formats and are encouraged to increase the stated minimums. Please contact a GUE representative for specific course information.

# C. Program Limits

- I. All dives are to maintain a working  $PO_2$  of no greater than I.4 and a resting PO of I.6 +/- .05.
- 2. No dives are to exceed an equivalent narcotic depth of 100 feet +/- 30 feet.
- 3. Student to Instructor ratio is not to exceed 3:1 during any overhead diving activity
  - 1. Gas consumption: I/6 of doubles for cave penetration.
  - 2. Maximum depth of 100 feet.
  - 3. Minimum 30 feet of visibility to enter a cave.
  - 4. Minimum 80cf of gas to enter a cave.
  - 5. No passages in which divers are forced to travel single file.
  - 6. No complex navigation (jumps, traverses, circuits); no more than one short gap (up to 20ft).
  - 7. No planned decompression.
  - 8. No scooter diving.
  - 9. No exploration.
  - 10. Dives are not to exceed 130' in depth.

#### D. Program Content

GUE Cave Level I is normally conducted over a 5-day period, and cumulatively involves a minimum 40 hours of instruction (lecture and in-water) designed to instill divers with an appreciation for the danger, challenge and beauty of the cave environment. All participants will conduct a minimum of twelve dives. Special emphasis will be placed on the unique challenge of overhead exposure and the identification, management and resolution of life-threatening adversity.

#### E. Diving Skills

A minimum of twelve dives, each with increasing level of task loading, will be completed within a minimum five-day period. The following set of skills will be performed on one or more dives and will constitute the skill set objective of this course:

- I. Pre-dive planning to include:
  - Assess and review diving limitations
  - Dive plan review
  - Equipment review
  - Equipment familiarization
- 2. Navigation, to include:
  - Visual reference
  - Guideline use
  - Limited and zero visibility
- 3. Procedures for gas failure; to include valve manipulation and regulator switching.
- 4. Air sharing scenarios to include breath hold management:
  - Out of air diver
  - Remote exit while air sharing
- 5. Use of various propulsion techniques
- 6. Dive partner rescue skills; including panicked, unconscious and convulsing diver
- 7. Lost diver and lost guideline exercise
- 8. Problem resolution
- 9. Loss of primary light.
- 10. Use of touch contact for limited and zero visibility situations.
- II. Use of line following techniques for limited/no visibility experiences.

# F. Performance Objectives

- I. Demonstrate proficiency in safe diving techniques, including pre-dive preparations, in-water activity and post-dive assessment.
- 2. Comfortably swim at least 200 feet without a mask while air sharing.
- 3. Efficiently and comfortably demonstrate how to donate air to an out of air diver in at least 10 air-sharing episodes; one of these should include a distance of at least 30 feet.
- 4. Be able to comfortably demonstrate at least two propulsion techniques that would be appropriate in delicate and/or silty environments.
- 5. Demonstrate awareness of team member location and a concern for safety, responding quickly to visual cues and dive partner needs.
- 6. Demonstrate proficiency with dive rescue techniques; including effective management of the following situations: assisting a panic-stricken diver, a convulsing diver and an unconscious diver.

- 7. Demonstrate the efficient deployment of a reserve light in less than 30 seconds.
- 8. Demonstrate excellent buoyancy control skills.
- 9. Demonstrate a calm demeanor while sharing air in zero visibility for at least 200 feet.
- 10. Perform a lost diver drill while remaining calm and maintaining a horizontal attitude and neutral posture.
- II. Demonstrate efficient valve management by switching regulators, shutting down a valve in less than I5 seconds and returning the valve to the open position again in less than I5 seconds.
- 12. Demonstrate a safe and responsible demeanor.
- 13. Demonstrate proficiency with guideline management in the following situations:
  - Simulated zero visibility line following; this would incorporate touch-contact skills
  - Efficient deployment of the guideline
  - Efficient removal of the guideline
  - Problem resolution including line entanglement, navigation in restrictive regions, and multiple line management
  - Locating the guideline in simulated zero visibility conditions
- 14. Complete the GUE written exam with an overall score of at least 90% and an information-critical score of 100%.

### G. Equipment Requirements

Each student should have, and be familiar with, all of the following required equipment. However, students should exercise caution before purchasing new equipment to avoid acquiring substandard equipment. Please contact a GUE representative prior to making any purchases. Information about recommended equipment can be obtained from the <u>equipment considerations</u> section of GUE's web site.

#### A. Tanks

• Students are required to use a redundant valve assembly, which allows the use of two first stages. Students will use double tanks and must start dives with a minimum of 90ft3.

### B. Regulators

- Two first-stages: each supplying a single second stage.
- One of the second stages must be on a seven-foot hose and should supply the diver's buoyancy compensator.
- One of the first stages must supply a pressure gauge and provide inflation for a dry suit where applicable.

### C. Buoyancy Compensators

• Back-mounted wings, mated with a harness and back plate.

- D. At least one depth-measuring device.
- E. Two timekeeping devices.
- F. Decompression tables.
- G. Mask and fins.
- H. At least one cutting device.
- I. Underwater slate, or Wet Notes.
- J. One reel/spool, with 100 feet of line, per diver.
- K. One primary reel per team, with a minimum of 300 feet of line.
- L. Three lights: one primary and two secondary.
- M. Exposure suits appropriate for the duration of exposure.
- N. At least three line markers of which at least three should be directional (line arrows) and two non-directional.

Note: Prior to the commencement of class, students should consult with a GUE representative to verify equipment requirements. All participants are responsible for providing all equipment or for making provisions to acquire equipment before the start of the course. In general, it is better for the student to learn while using his or her own equipment.