



GUE Cave 2 Course

The GUE Cave Level 2 course is the second in a series of three courses designed to develop cave diving proficiency. This very demanding course seeks to refine the cave diving techniques of divers who have mastered the requirements of Cave 1. To succeed in this course, students must be practiced in the fundamental aspects of cave diving and comfortable in the use of double tanks.

The GUE Cave Level 2 course builds upon previously learned skills focusing on extending essential cave diving techniques. These skills include: a focus on environmental awareness, dive buddy awareness, problem resolution, stress management and advanced navigation. Penetrations during this training typically extend beyond 1500 feet. This course is heavily experience based, and includes many practical, task-oriented skills that must be mastered before a student is competent to dive at this level.

A. Prerequisites

1. Must be at least 18 years of age.
2. Must have a completed application packet on file, including medical information, release forms, and dive history.
3. Must have completed a GUE Cave Level 1 class. Divers who are not previously trained by GUE must first secure the approval of a GUE representative before entering this program, and be prepared to engage in supplemental training to remedy any training deficiencies. Additional time and fees are at the discretion of the instructor.
4. Must have proof of at least 200 logged dives, with at least 20 dives in double tank, DIR configuration; 25 of these must be cave dives.
5. Must be physically fit, mentally stable and clearly focused.
6. Must be a nonsmoker.
7. Must obtain the authorization for the use of prescription drugs by a physician and must have such authorization approved by a GUE representative prior to the onset of diver training.
8. Must submit a diving resume to headquarters via electronic or land mail.
9. Must hold DAN Master level insurance or equivalent.
1. Must be able to swim at least 400 yards in less than 14 minutes without stopping.
2. Must be able to swim a distance of at least 60 feet on a breath hold.
3. Must have enriched air training.
4. Dives are not to exceed 130'.

B. Duration

The GUE Cave Level 2 class is structured around a minimum 40-hour, five-day period consisting of at least 10 dives at a minimum of four different diving locations. GUE representatives may structure this 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

1. All dives are to maintain a working PO₂ of no greater than 1.4 and a resting PO₂ of 1.6 +/- .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
4. Maximum use of 1/3 of gas supply for cave penetration
5. No scooter diving

D. Program Content

GUE Cave Level 2 is normally conducted over a 5-day period, and cumulatively involves a minimum of 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 ten cave dives. Special emphasis will be placed on: the requirements of extended overhead penetration, advanced navigation techniques (including traverses, circuits and siphons) advanced gas management, restrictive passage negotiation, precision propulsion techniques and decompression risk, management and protocol.

E. Diving Skills

A minimum of ten cave dives each with increasing level of task loading will be completed within a minimum five-day format. The following skills will be performed on one or more dives:

1. 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, including 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.
11. Use of line following techniques for limited visibility experiences.

F. Performance Objectives

1. Demonstrate proficiency in safe diving procedures, 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 50 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 simulated zero visibility for at least 200 feet.
10. Perform a lost line drill in simulated zero visibility conditions.
11. Demonstrate the comfortable management of an extended air-sharing exit for no less than 800 feet.
12. Demonstrate advanced navigational ability by completing at least two jumps and attempting a circuit and/or traverse.
13. Demonstrate superior valve management by switching regulators, shutting down a valve in less than 10 seconds and returning the valve to the open position again in less than 10 seconds.
14. 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
15. Demonstrate a safe and responsible demeanor throughout all training.
 16. All course participants must 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 when purchasing new equipment to avoid acquiring substandard equipment. Please contact a Global Underwater representative prior to making any purchases. Information about recommended equipment can be obtained from the equipment considerations section of the GUE web site.

A. Tanks

- Students are required to use a manifold assembly with twin tanks, each with an individual capacity of at least of 95ft³.
- One stage bottle
- One oxygen bottle

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, Wet Notes.

K. One reel/spool with 100 feet of line minimum per diver.

L. One primary reel with a minimum of 300 feet of line per team.

- M. Three lights: one primary of at least 35 watts and a burn time of at least 100 minutes per dive and 200 minutes per day and two secondary
- N. Exposure suits appropriate for the duration of exposure
- O. 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.