



GUE Cave 3 Course

The GUE Cave Level 3 course is the third in a series of three courses designed to develop cave diving proficiency. Cave 3 was conceived as a mastery level course developed specifically for the proficient cave diver who is seeking to amplify his or her cave diving skills.

Participants must be experienced cave divers who are dedicated to mastering the art of cave diving. Given the specialized nature of this training—penetration here will easily exceed 2000 ft—participants must be physically fit, emotionally stable and highly motivated. This level of training is essential for anyone considering extreme diving exposures.

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

A. Prerequisites

1. Must be a minimum 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 2 course. Divers 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 a minimum of 500 logged dives, with at least 200 of these being double tank dives. The participant must have at least 100 Cave dives.
6. Must be physically fit, mentally stable and clearly focused.
7. Must be a nonsmoker.
8. Prior to the onset of diver training, the use of prescription drugs must be authorized by a physician and approved by a GUE representative.
9. Must submit a diving resume to headquarters via electronic or land mail.
10. Must hold DAN Master level insurance or equivalent.
11. Must be able to swim at least 400 yards in less than 12 minutes without stopping.
12. Must be able to swim a distance of at least 60 feet on a breath hold.
13. Must have enriched air training.

B. Duration

The GUE Cave Level 3 class is structured around a minimum 60-hour, 10-day period consisting of at least 14 cave dives at a minimum of four different diving locations. It is highly recommended that participants distribute this training over at least two sessions. 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 PO_2 of no greater than 1.4 and a resting PO_2 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.

D. Program Content

GUE Cave Level 3 is normally conducted over a 10-day period, and cumulatively involves a minimum of 60 hours of instruction (lecture and in-water) and is designed to instill in divers the essence of extended range diving. Special emphasis is placed on how to efficiently and safely execute dives that entail extreme exposures. Lecture topics will focus on the preparation and completion of extended range exploration, including methods for managing the eventualities associated with long-term immersion.

E. Diving Skills

A minimum of 10 cave dives, each with increasing level of task loading, will be completed within a minimum ten-day period. The following set of skills will be performed on one or more dives and will constitute the skill set of this course:

1. Pre-dive planning to include:
 - Access 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
 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. Demonstrate a mastery of swimming by maintaining a calm demeanor while swimming for at least 200 feet without a mask while air sharing (open water only- 30' or shallower).
3. Efficiently and comfortably demonstrate how to donate air to an out of air diver in at least 20 air-sharing episodes; one of these should include an out of air 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 a mastery of awareness for team member location and a concern for safety, responding quickly to visual cues and dive partner needs.
6. Demonstrate mastery of dive rescue techniques; including effective management of the following situations: assisting a panic-stricken diver, rescuing a convulsing diver from depth and managing an unconscious diver (open water only- 30' or shallower).
7. Demonstrate the efficient deployment of a reserve light in less than 10 seconds.
8. Demonstrate mastery of buoyancy control skills.
9. Demonstrate mastery of zero visibility conditions, by maintaining a calm demeanor while sharing air for at least 200 feet in simulated zero visibility conditions.
10. Perform a lost line drill in simulated zero visibility conditions.

11. Demonstrate mastery in air sharing, by conducting an extended air-sharing exit from at least 300 feet and/or 5 minutes.
12. Demonstrate mastery over advanced navigation by setting up and completing both a complex circuit and traverse.
13. Demonstrate a mastery of 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:
 - 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 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 equipment considerations section of the GUE web.

A. Tanks

- Students are required to use a manifold assembly with twin tanks, each with an individual capacity of at least of 95ft .
- 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. Underwater slate, or Wet Notes.
- I. One reel/spool, with a minimum of 100 feet of line, per diver.
- J. One primary reel per team, with a minimum of 300 feet of line.
- K. Three lights; a primary light of at least 35 watts with a burn time of at least 100 minutes per dive, and 200 minutes per day, and two secondary lights.
- L. Exposure suits appropriate for the duration of exposure.
- M. At least three line markers of which at least three should be directional (line arrows) and two non-directional.
- N. Optional: diver propulsion vehicle.

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.