



Cave Instructor Program

- ▶ Welcome and Course Overview
- ▶ The TDI Instructor
- ▶ Dive Leader Risk Management
- ▶ Methods of Instruction
- ▶ Business Side of Diving
- ▶ Teaching the TDI Cave Diver Program

The TDI Cave Instructor Program is typically an upgrade from the TDI Intro to Cave Instructor rating. If this is the first program an instructor is completing through TDI more time will need to be spent on the core topics listed below. Once an instructor has completed their initial TDI Cave Instructor program, or any initial TDI Instructor program, they will need only to focus on the course specific content for future programs.

Objectives

The object of this program is to:

- Introduce the instructor to TDI
- Introduce the candidate to the TDI Instructor Guide and Student materials
- Demonstrate how to use the TDI Diving in an Overhead Environment materials to train a new diver

- Teach the instructor “How to Conduct” the TDI Cave Diver program
- Demonstrate how to register and certify a new Cave diver

Prerequisites for TDI Cave Instructor Program

See the current TDI Cave Instructor standards for the prerequisites and requirements for this program.

Materials Required

Teaching any program with outdated materials is just asking for problems. The trainer must confirm that their materials are current and each instructor has the current materials with which to teach the program.

Instructor Trainer

- TDI Diving in an Overhead Environment Diver Manual
- TDI Diving in an Overhead Environment Knowledge Quest
- TDI Diving in an Overhead Environment Instructor Guide
- TDI Diving in an Overhead Environment PowerPoint Presentation®
- TDI Instructor Trainer Manual

Instructor Candidate

- TDI Diving in an Overhead Environment Diver Manual
- TDI Diving in an Overhead Environment Diver Knowledge Quest
- TDI Diving in an Overhead Environment Instructor Guide
- TDI Diving in an Overhead Environment PowerPoint Presentation®



Note: Prior to beginning the program the instructor candidate should review all instructor and diver materials and complete all knowledge quests and final exams so they are completely familiar with the subject matter and the support materials to teach the TDI Cave Diver program.

The topics to be covered are:

- Welcome and Course Orientation
- The TDI Instructor*
- Dive Leader Risk Management*
- Methods of Instruction*
- Business Side of Diving*
- Courses a TDI Cave Instructor Can Teach

*Core Topics: These core topics will be found in Part One of this manual; IT Information.

Welcome and Course Overview

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Paperwork

- Instructor Registration Form
- Personal Information
- Liability Release
- Medical Statement

Let's Get to Know Each Other



Professional Staff

Participants

- Your name?
- What type of technical diving experience do you have?
- Which technical diving activities interest you the most?
- Why are you interested in becoming a technical instructor?

About This Program

Course Objective

- Develop the appropriate knowledge and skills that are expected of every dive professional

Subject Areas

- The TDI Instructor
- Dive Leader Risk Management
- Methods of Instruction
- Business Side of Diving

Structure and Schedule

- Independent Study
- Classroom Presentations
- Confined Water Training
- Open Water Training



Required Equipment

- Items you'll need for this course

Any Questions?

The TDI Instructor

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Refer to Instructor Trainer Manual Part 1 Instructor Training Process
Chapter 2-The SDI/TDI/ERDI Instructor

Dive Leader Risk Management

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Refer to Instructor Trainer Manual Part 1 Instructor Training Process
Chapter 3-Dive Leader Risk Management

Methods of Instruction

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Refer to Instructor Trainer Manual Part 1 Instructor Training Process
Chapter 4-Methods of Instruction



Business Side of Diving

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Refer to Instructor Trainer Manual Part 1 Instructor Training Process
Chapter 5-Business of Diving

Teaching the TDI Cave Diver Program

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- Program overview
 - Classroom requirements
 - Students are required to become familiar with: risk and hazards of overhead environments, the inability to make a direct ascent to the surface when in an overhead environment, use of a reel as a navigational tool and use of artificial light. Since this course is a progression from the intro to cave, it is also important the divers learn proper techniques for jumping off the mainline and cylinder placements when conducting decompression dives. An Instructor must be able to demonstrate instructor level knowledge on all topics and skills in the current TDI Cave Diver standards.
 - Pool / confined water requirements
 - While a pool / confined water session is not required, an instructor may take this opportunity to conduct an update with divers who have been inactive for a period of time, or conduct a skill evaluation to help the students become better divers. This is the ideal setting to conduct buoyancy skills, trim and equipment configuration. If the



depth of the pool/confined water permits, this is also a great setting to introduce and practice lift bag drills, line drills and blacked out or no mask skills.

- Open Water Requirements

- Eight dives with a minimum of 240 minutes of bottom time at three different sites are required. If this program is conducted in conjunction with other allowed courses, the eight dives plus the required number of dives from the other program are required. For the cave dives it is best to take divers progressively deeper into the cave so they get a slower introduction to overhead and out of the light zone diving, prior to jumping off the mainline or entering into areas with restrictions. The first couple of dives can be started in the larger cave area so divers get a sense of how the entrance to the cave is shaped, tie-off point(s) and entry and exit points. This also allows an opportunity for the instructor to monitor the comfort level and abilities of the diver.

- Materials

- Review all diver materials to make sure the instructor candidate is familiar with all diver materials and how they are supported by the instructor materials.

- Diver Materials

- Online
- Printed

- Required paperwork

- Discuss in detail how the instructor should complete the required paperwork

- The instructor candidate must be familiar with all forms and be able to answer any question a diver may have regarding the completion of those forms

- Diver Training Folder



- Waiver
- Medical Questionnaire
- Complete a thorough review of the appropriate TDI Instructor manual including:
 - How to conduct:
 - Academic sessions
 - Cover helpful hints on how to teach more involved subjects
 - Pool/ Confined water sessions (if one is conducted)
 - Helpful hints on:
 - How to teach skills
 - Conducting an update / skill evaluation
 - Possible problems an instructor may experience
 - How to deal with those problems
 - Open water sessions
 - Helpful hints on:
 - How to conduct skills in open water vs pool/confined
 - Possible problems an instructor may experience in open water
 - How to deal with those problems

List of tips on how to teach various aspects of this program include:

Policy for cave diving – many inland caves are on private property and divers have access thanks to the good nature of the landowners. This privilege can be taken away if respect is not shown to the landowners. It is best to explain to candidates the proper etiquette when working with landowners so



that future divers will continue to have access.

Equipment considerations – since divers have already been introduced to overhead environments, the list of additional equipment such as: two reels, three lights and two cutting devices should be expected, but it is very important to cover these requirements again as well as the addition of extra cylinders for added reserve gas or for decompression obligations.

Communication – overhead hand signals will have already been covered in the intro to cave course but reviewing them again would be prudent. New signals the divers may need include: Jump off mainline, decompression stop and line marker. It is not uncommon for divers to have varying hand/light signals and if you have never worked with them before or they are with a new buddy, it is best to get this worked out before the dive.

Swimming techniques – divers will all have a preferred kick style but most have never considered where the thrust from their fin goes or that the thrust could silt out or damage the environment they are in. Have divers swim either in a pool or basin using different kicks, and see which works best for them. Another propulsion technique that should be introduced is the pull and glide by using hands which is commonly used in areas where fins cannot be kicked and is a low siltation technique.

Cave environment – explaining how cave systems are formed is a very important and fun part of the course. Explaining that a majority of freshwater systems are a large network that makes up the drinking water of a given area is something very few people know.

Problem solving – this topic needs to be explained and practiced till it becomes second nature to the diver. The cave course may be the first course that has taken the diver into an overhead environment out of the light zone and for the first time they will not be able to make a direct ascent to the surface or go back the same way they came in, in order to exit. Teaching the divers good air management and showing them how to use a reel as well as staying on the main line will go a long way in problem solving underwater.



List of academic / pool-confined water / open water topics for candidate to present:

History and formation of caves

Cave etiquette

Advantages and Disadvantages of intro to cave diving

Cave environment: geology, local access

Accident analysis

Decompression in caves

Lost line

Scheduling Options for this program

Courses can be scheduled with a one to one ratio, as a group or scheduled in conjunction with other TDI courses. Each of these will require different time commitments and scheduling logistics. A course with one cave diver will take less time than if combined with another TDI course with a group. The cave course also requires that it be conducted in three different sites so enough time needs to be allotted.

Overview

The TDI Cave Instructor program is comprised of classroom sessions and cave dives. One day should be allotted for the academic session with four full days for the cave dives.

If this program is taught with any of the other allowed instructor programs, two to three full days for the classroom should be scheduled and the appropriate amount of days for the cave dives if two dives per day are scheduled. Since the instructor course requires a panel evaluation, ensure that other cave evaluators or senior cave instructors are available. There may be times when the course can be completed in less time but it is always good to allot an extra day or two for make-up time or weather.



Classroom

You will need various pieces of equipment normally used for cave diving as well as some maps (if available) or drawings of the cave systems that you may be diving. You can have the candidate conduct the research on the cave system(s) and let them bring the information and present it. The instructor must be able to demonstrate to instructor level quality all academic topics in the current TDI Cave Diver standards.

Dives

Four days of diving should be scheduled if the program is taught by itself. If it is taught in conjunction with any of the other accepted TDI Instructor programs, additional days will need to be scheduled for the cave dives considering two dives per day will be completed. It is always good practice to build in some extra time for dives so the instructor candidates can clear their schedule.

Knowledge Quest Review Questions if applicable

No instructor level Knowledge Quest is available for this program, although the candidate should complete the diver level Knowledge Quest so they are familiar with the information.

Final Exam

No instructor level final exam is available for this program, although the candidate should complete the diver level final exam so they are familiar with the information.



