

ADVANCED OPEN WATER DIVER COURSE

INSTRUCTOR GUIDE



Standards outlined in the General Standards and Procedures Guide apply to the PADI Advanced Open Water Diver Course, except as noted otherwise in this guide.

Section One

Course Standards

Adventure Dives

The first dives of PADI Specialty Diver courses for which there are standardized specialty instructor guides (and the PADI Rebreather Diver course) qualify as Adventure Dives.

Note: The PADI Rebreather Diver course is not a PADI Specialty Diver course, but the first dive, which is in confined water, may count as an Adventure Dive.

Check Sections Two and Three for Adventure Dive knowledge development options and skill requirements.

Certification Requirements

For Adventure Diver, student divers meet performance requirements:

- Complete three Adventure Dives.
- Complete the three Knowledge Reviews for the completed Adventure Dives.
- Complete Thinking Like a Diver Knowledge Development section.

For Advanced Open Water Diver, student divers meet performance requirements:

- Complete five Adventure Dives including Deep and Underwater Navigation.
- Complete the five Knowledge Reviews for the completed Adventure Dives.
- Complete Thinking Like a Diver Knowledge Development section.

Certified Assistant

Certified assistants for the Cavern, Dry Suit, Enriched Air, Full Face Mask, Ice and Rebreather (unless diving in standard open circuit equipment) Adventure Dives must hold the corresponding diver-level specialty certification for the dive.

Depth

For divers age 15 or older – 30 metres/100 feet

Depth requirements vary by dive. Check Section Three for information specific to each Adventure Dive and the General Standards and Procedures Guide for junior diver limitations.

For rebreather use, maximum depth is the depth for which divers are qualified with the rebreather or 18 metres/60 feet, whichever is shallower.

Diver Prerequisites

- **Certified as PADI (Junior) Open Water Diver**

Check Section Two for minimum age prerequisites specific to each Adventure Dive.

Note: 10- and 11-year-old divers may only earn a Junior Adventure Diver certification.

Equipment

As described in the General Standards and Procedures Guide, **plus each diver has a dive knife/tool, a compass and a dive computer (or timing device and eRDP_{ML}/RDP Table).**

Check Section Three and/or the related Specialty Instructor Guide for equipment requirements specific to each Adventure Dive.

Forms

Download the most current forms from padi.com/Pros Site. Check with your PADI Office for region-specific releases, applications or forms.

Required

Continuing Education Administrative Document (10038 or EU 10541) with Diver Medical form (10346)

Recommended

Advanced Open Water Diver Course Documentation Worksheet (10090)

Instructor Rating

Instructor

Note: See Adventure Dive Knowledge Development Options and Requirements chart

Materials

Required

- **PADI *Advanced Open Water Diver eLearning or Manual***

Exception: When the diver has PADI specialty manuals or AWARE materials for each Adventure Dive conducted.

- **Log book**

Each student diver must use the PADI Advanced Open Water Diver Multipurpose Data Carrier (69230) during open water dives.

Recommended

- PADI *Advanced Open Water Diver Video*
- PADI Specialty Diver Manuals and videos
- AWARE course materials

Ratios

General – 8:1 May add four student divers per certified assistant

On deep dives, do not increase this ratio with the use of certified assistants.

Ratios may vary by dive as noted in Section Three.

Supervision

General – **Indirect supervision allowed for dives conducted to 18 metres/60 feet or less. Direct supervision required for dives conducted deeper than 18 metres/60 feet, unless all divers have completed the Deep Adventure Dive.**

Supervision may vary by dive. Check Section Three for information specific to each Adventure Dive.

Section Two

Knowledge Development

Review information necessary to safely complete the Adventure Dive with divers before each dive. You may do this through predive briefings, structured discussions or by having divers complete the appropriate Adventure Dive Knowledge Review. If available, you may use PADI Specialty Diver/AWARE materials for any Adventure Dive.

Ideally, the Thinking Like A Diver knowledge development section should precede the first Adventure Dive, but it may be completed any time prior to certification.

Give divers credit for the Adventure Dive only when the Knowledge Review is completed and reviewed. Complete and sign the Adventure Dive Training Record or otherwise document that both knowledge review and dive are complete.

Look for Knowledge Review Answer Keys on the Pros' Site of padi.com

Adventure Dives Conducted Using PADI Specialty Diver Course Materials

When using specialty diver materials for Adventure Dives not supported by PADI Advanced Open Water Diver materials, meet these requirements:

- 1. You must be certified as an instructor for the specialty.**
- 2. Student divers must meet all prerequisites and other requirements for the specialty.**

Exception: Student divers do not have to be Advanced Open Water Divers for the Cavern, Ice or Self-Reliant Adventure Dives.

- 3. Use Knowledge Reviews in the specialty materials to assess knowledge development mastery.**

Adventure Dive Knowledge Development Options and Requirements

Material Options				
Adventure Dive	Advanced Open Water Diver materials	Specialty Diver Manual/AWARE materials	Must be Specialty Diver Instructor	Diver Minimum Age
Adaptive Support			✓	15
Altitude	✓			10
Boat	✓	✓		10
Cavern			✓	18
Deep	✓	✓		12
Delayed Surface Marker Buoy				12
Digital Underwater Imaging	✓	✓		10
Dive Against Debris (AWARE)		✓	✓	10
Diver Propulsion Vehicle		✓	✓	12
Drift	✓	✓		12
Dry Suit	✓	✓	✓	10
Enriched Air		✓	✓	12
Fish Identification	✓			10
Full Face Mask			✓	12
Ice			✓	18
Night	✓	✓		12
Peak Performance Buoyancy	✓	✓		10
Rebreather		✓	✓	18
Rescue	✓			12
Search & Recovery	✓	✓		12
Self-Reliant			✓	18
Shark Conservation (AWARE)		✓	✓	12
Sidemount		✓	✓	15
Underwater Naturalist	✓	✓		10
Underwater Navigation	✓	✓		10
Wreck	✓	✓		12

Section Three

Open Water

General Open Water Considerations

- Do not combine the performance requirements for two or more dives into one Adventure Dive.
- Do not conduct Adventure Dives in any situation where direct access to the surface is not possible.

Exceptions: Ice and Cavern Adventure Dives.

- On every Adventure Dive, prompt divers to think like a diver before, during and after the dive. In the briefing include reminders regarding dive planning, applying situational awareness, managing task loading and demonstrating good dive habits. During the debriefing, ask divers questions that require them to apply Thinking Like a Diver principles.
- When conducting Dive One of a PADI Specialty Diver course, follow all depth limits, ratios and other training requirements as noted in the appropriate specialty instructor guide.

Core Dives

Deep Adventure Dive

Considerations

1. If you do not have recent dive experience with the diver, in preparation for the dive generally assess diver knowledge, and, before going to depth in open water, evaluate the diver inwater for prerequisite skills needed to complete the Deep Dive.
2. Directly supervise all student divers. Position yourself so that you or a certified assistant can make immediate physical contact with and render assistance to divers.

Continually observe divers with only the brief, periodic interruptions needed to lead the dive and to provide assistance to individual divers.

3. Maximum ratio is 8:1. Do not increase this ratio with the use of certified assistants. If conditions affect your ability to directly observe and respond to divers, reduce ratios.
4. Conduct dive between 18-30 metres/60-100 feet.
5. Follow depth limits and ratios for Junior Divers as described in the General Standards and Procedures Guide.

Performance Requirements

1. With a buddy, plan and manage gas use, including determining turn pressure, ascent pressure and reserve pressure. Establish no stop and dive time limits.
2. Descend using a line, wall or sloping bottom.
3. Compare changes in color at the surface and at depth.
4. Compare a dive computer (or depth gauge) reading to another diver's depth reading.
5. Ascend at a rate not to exceed 18 metres/60 feet per minute using a dive computer (or depth gauge and timing device).
6. Make a safety stop at 5 metres/15 feet for at least three minutes.

Underwater Navigation Adventure Dive

Performance Requirements

1. Maintain neutral buoyancy.
2. Determine the average number of kick cycles *and* average amount of time required to swim underwater at a normal, relaxed pace approximately 30 metres/100 feet.

3. **Navigate to a predetermined location and return to within 15 metres/50 feet of the starting point using natural references and estimated distance measurement (kick cycles or time). Surface only if necessary to verify direction or location.**
4. **Position and handle a compass underwater to maintain an accurate heading while swimming.**
5. **Navigate without surfacing to a predetermined location and return to within 6 metres/20 feet of the starting point using a compass and estimated distance measurement (kick cycles or time).**
6. **Swim a square or rectangular pattern underwater, returning to within 8 metres/25 feet of the starting point using a compass and beginning from a fixed location.** Recommended size of square – each side 30 metres/100 feet, or total combined length of approximately 120 metres/400 feet.

Elective Dives

Adaptive Support Diver Adventure Dive

Considerations

1. **Use the PADI Adaptive Techniques Specialty Instructor Guide and have student divers complete Knowledge Review Part 1.**
2. **Conduct the required Confined Water Workshop One: Adaptive Techniques.**
3. **Complete all Open Water Workshop One performance requirements.** Recommended depth is 6–12 metres/20–40 feet.

Altitude Adventure Dive

Considerations

At altitudes between 2400–3000 metres/8000–10,000 feet, wait a minimum of six hours after arrival at altitude before diving.

Performance Requirements

1. **Determine the no decompression limits for the depth at the altitude at which the dive will take place using a dive computer that has altitude capability or using the Recreational Dive Planner and the Theoretical Depth at Altitude Table.**
2. **Descend using a reference line or sloping bottom.**
3. **Compare computer depth readings with another diver's computer (or depth gauge) and record the differences (if any) on a slate or wet book.**
4. **Ascend no faster than 9 metres/30 feet per minute, using a dive computer (or depth gauge and timing device).**
5. **Ascend using a reference line or sloping bottom.**
6. **Make a safety stop for at least a three minutes at a theoretical depth of 5 metres/15 feet, or as guided by dive computer.**

Boat Adventure Dive

Considerations

Student divers must have an inflatable signal tube or DSMB to use.

Performance Requirements

1. **Identify the following areas of the specific boat being used for the dive: bow, stern, starboard, port, entry area, exit area and area to stow dive equipment.**

2. **Locate important emergency/safety equipment aboard the boat (such as: first-aid kit, oxygen, AED unit, life preservers, dive flag, radio and fire extinguisher).**
3. **Enter the water based on the type of dive boat being used.**
4. **Navigate from and back to the boat, using method appropriate for the environment, and ascend using the boat's mooring/anchor line, a reference line, or near the exit area, as planned and appropriate for the environment and boat.**
5. **Make a safety stop at 5 metres/15 feet for at least three minutes.**
6. **Deploy an inflatable signal tube at the surface, or deploy a delayed surface marker buoy (DSMB) from underwater.**
7. **Exit the water based on the type of dive boat being used.**

Cavern Adventure Dive

Considerations

1. **Use the Cavern Diver Specialty Instructor Guide and have student divers complete the Knowledge Review and all Dive One performance requirements.**
2. **Conduct the dive in open water, practicing the use of lines and reels and emergency procedures. Exploration of a cavern is optional.**
3. **If entering a cavern, directly supervise divers at a maximum ratio of 3:1.**
4. **If entering a cavern, limit the dive to within the light zone and within 40 metres/130 feet from the surface, vertical and horizontal distance included.**

Delayed Surface Marker Buoy Adventure Dive

Considerations

1. **Use the Delayed Surface Marker Buoy Diver Specialty Instructor Guide and have student divers complete the Knowledge Review.**
2. **Maximum depth is 18 metres/60 feet.** Recommended depth is 9–12 metres/30–40 feet.

Performance Requirements

1. **Prepare, stow and adjust DSMB and reel that will be used on the dive.**
2. **Deploy a DSMB from a stationary position.**
3. **Swim underwater while towing a DSMB on the surface for at least 10 minutes, adjusting the line by reeling it in and out as required.**
4. **Ascend as a buddy team while using a DSMB line as a visual or tactile reference.**
5. **Deflate and recover a DSMB at the surface.**

Digital Underwater Imaging Adventure Dive

Considerations

Student divers must have an underwater camera system to use.

Performance Requirements

1. **Demonstrate how to properly set up an underwater camera system, including camera and external light (if used) settings and housing preparation.**
2. **Shoot stills and/or video that demonstrate fundamentally usable exposure, focus and composition.**

3. If shooting video, demonstrate fundamental awareness of shooting to tell a story and allow for editing.
4. Dive with a camera in a manner that demonstrates prioritizing diver safety and protecting the environment over imaging and cameras.

Dive Against Debris (AWARE) Adventure Dive

Considerations

1. Use the **AWARE – Dive Against Debris Specialty Instructor Guide**.
2. Have student divers use the **Dive Against Debris Survey Guide** to complete the Knowledge Review.
3. Complete all Dive One performance requirements.

Diver Propulsion Vehicle (DPV) Adventure Dive

Considerations

1. Use the **Diver Propulsion Vehicle Diver Specialty Instructor Guide**.
2. Have student divers complete the Knowledge Review in the **PADI *Diver Propulsion Vehicle (DPV) eLearning/Manual***.
3. Complete all Dive One performance requirements. Recommended depth is 6–18 metres/20–60 feet.

Drift Adventure Dive

Performance Requirements

1. With a buddy, plan a drift dive accounting for appropriate techniques for the environment, conditions, depth and other variables.
2. Make an entry specific to the environmental conditions and the planned drift technique(s).
3. Maintain buddy contact as planned for that environment.

4. **Maintain neutral buoyancy and avoid unintended contact with aquatic life and the bottom.**
5. **Make a safety stop at 5 metres/15 feet for at least three minutes.**
6. **Exit as planned, specific to the particular environmental conditions.**

Dry Suit Adventure Dive

Considerations

1. **Directly supervise divers at a maximum ratio of 6:1. Two additional students may be added with a certified assistant to a maximum of eight students.**
2. **Orient divers to dry suits in confined water before divers use them for the first time in open water. See Dry Suit Orientation in the General Standards and Procedures section for requirements.**
3. **Each student diver must use a dry suit.**
4. **The instructor must directly supervise student divers on dives deeper than 18 metres/60 feet at a maximum ratio of 4:1.**
5. **After divers successfully demonstrate all performance requirements, including removal and replacement of the scuba unit at the surface, a certified assistant may directly supervise a maximum of two divers (2:1) for the remainder of the dive.** The safety stop does not have to be assessed by the instructor prior to certified assistant direct supervision.

Performance Requirements

1. **Put on and remove a dry suit with another diver's help.**
2. **Adjust weighting at the surface – deflate BCD and dry suit, hold a normal breath and float at eye level (top of head level if using a rebreather).**

3. **Perform a controlled descent and avoid suit squeeze.**
4. **Demonstrate neutral buoyancy by gently rising and falling in a controlled manner during inhalation and exhalation for one minute** (rise and fall not required if using a rebreather).
5. **Hover using buoyancy control for at least one minute, without kicking or sculling** (minor hand sculling allowed if using a rebreather).
6. **Maintain neutral buoyancy during the dive and avoid accidentally kicking up silt or touching the bottom.**
7. **Perform a neutrally buoyant ascent from the bottom, at a rate no faster than 9 metres/30 feet per minute.**
8. **Make a safety stop at 5 metres/15 feet for at least three minutes.**
9. **Remove and replace scuba kit and weights at the surface.**

Enriched Air Adventure Dive

Considerations

1. **Use the Enriched Air Diver Specialty Instructor Guide.**
2. **Have student divers complete the Knowledge Review in the PADI *Enriched Air Diver Manual* or *Enriched Air Diver eLearning*.**
3. **If, prior to the dive, student divers have not completed the Enriched Air Diver Knowledge Review, present the Enriched Air Dive Today briefing.**
4. **Have divers complete the Enriched Air Diver course Practical Application 1 prior to the dive. This may be part of the predive briefing and preparation.**
5. **Limit the dive to a maximum depth of 30 metres/ 100 feet or PO_2 of 1.4 ata for the blend – whichever is shallowest.**

6. Limit the maximum allowable enriched air oxygen content to 40 percent.
7. If divers will dive using air-only computers, the maximum allowable oxygen content is 32 percent, the maximum depth is 30 metres/100 feet (or shallower if a shallower limit applies) and the total dive time for the day is 160 minutes.
8. Watch student divers as they set their enriched air dive computer and confirm correct settings. You may then indirectly supervise the dive. You may also indirectly supervise divers who have successfully completed both Enriched Air Diver course Knowledge Development Sections and the final exam.

Fish Identification Adventure Dive

Considerations

Each student diver must have a slate or wet book.

Performance Requirements

1. Categorize fish by placing them in appropriate family groups, and identify specific species.
2. Record fish sightings on a slate, including abundance and habitat information.
3. Sketch/photograph and describe characteristics of unfamiliar fish; then attempt to determine their identities after the dive using a field guide, fish identification slate and/or online resources.
4. Demonstrate appropriate and responsible dive practices and behaviors to avoid negative environmental effects.

Full Face Mask Adventure Dive

Considerations

1. Use the Full Face Mask Diver Specialty Instructor Guide and have student divers complete the Knowledge Review.
2. Conduct the required confined water dive and have divers practice using the full face mask they'll use during the Adventure Dive.
3. Complete all Dive One performance requirements.
4. Maximum depth is 18 metres/60 feet.
5. Divers must carry a traditional scuba mask as a backup.

Ice Adventure Dive

Considerations

1. Use the Ice Diver Specialty Instructor Guide and have student divers complete the Knowledge Review and all Dive One performance requirements.
2. The minimum team size for an ice diver training dive is two safety divers and two surface tenders (primary and rescue) in addition to the dive team of up to two student divers and one instructor.
3. Maximum depth is 18 metres/60 feet linear distance from the entry hole, vertical and horizontal distance included.

Night Adventure Dive

Considerations

1. Conduct this dive any time between sunset and sunrise.
2. Directly supervise divers at a maximum ratio of 8:1 or have a certified assistant supervise divers at a maximum ratio of 4:1.

3. **Each student diver must have an underwater light.**
A backup underwater light and marker/chemical light is recommended.

Performance Requirements

1. **Descend using a reference line or sloping bottom.**
2. **Communicate on the dive using both hand signals and dive lights.**
3. **Demonstrate how to use a dive light, submersible pressure gauge, compass, timing device and depth gauge at night.**
4. **Navigate to a predetermined location using a compass/natural features and return to within 8 metres/25 feet of the starting point. When necessary, surface for orientation.**
5. **Maintain buddy contact throughout the dive.**
6. **Ascend using a reference line or sloping bottom.**

Peak Performance Buoyancy Adventure Dive

Performance Requirements

1. **Rig a weight system with the following considerations in mind:**
 - a. **Estimate weights using PADI's Basic Weighting Guidelines, and/or based on prior experience using the same equipment in the same type of environment.**
 - b. **Position and distribute the weight for comfort and desired body position (trim) in the water.**
2. **Streamline equipment by properly securing and attaching all hoses, gauges and accessories.**
3. **Adjust for proper weighting – float at eye level at the surface with an empty BCD, while holding a normal breath (top of head level if using a rebreather).**

4. **Make a controlled, slow descent to the bottom and adjust for neutral buoyancy.**
5. **Adjust for neutral buoyancy at a predetermined depth.**
6. **Hover for 60 seconds without rising or sinking more than 1 metre/3 feet by making minor depth adjustments using breath control only (open-circuit scuba), or using very minor hand/fin sculling only (rebreathers).**
7. **Throughout the dive, control buoyancy and swim relaxed and neutrally buoyant in a horizontal position without touching the bottom or breaking the surface, making frequent and small adjustments to buoyancy as needed.**
8. **Reposition weights as appropriate to adjust trim, and hover in different positions – vertical, horizontal, feet elevated and head elevated.**
9. **Conduct a post-dive buoyancy check to confirm the appropriateness of the amount of weight worn.**

Rebreather Adventure Dive

Considerations

1. **Use the Rebreather Diver Course Instructor Guide.**
2. **Have student divers complete PADI Rebreather Diver Chapter One and Knowledge Review One using the *PADI Rebreather & Advanced Rebreather Diver Manual*.**
3. **Have divers complete the PADI Rebreather Diver course Practical Application 1 prior to the dive. This may be part of the pre-dive preparation.**
4. **Complete all Dive One performance requirements.**
5. **Divers who are certified as PADI Adventure Divers, have made the Underwater Navigation and Deep Adventure Dives and meet all other prerequisites for the Integrated**

PADI Rebreather Diver and Advanced Rebreather Diver courses may complete the first dive of the integrated program (Rebreather Dive 1 and Advanced Rebreather Dive 1 combined) as the Rebreather Adventure Dive. It may be credited toward the integrated program.

Rescue Adventure Dive

Considerations

1. **Have divers complete Rescue Diver course knowledge development: Section One – Responding to Diver Emergencies and Section Three – Missing Diver Procedures, via:**
 - a. Completing the Rescue section and Knowledge Review in *Advanced Open Water Diver eLearning*.
 - b. Study using PADI *Rescue Diver eLearning* or the *Rescue Diver Manual*
 - c. Cover the topics using the Rescue Diver Course Lesson Guide Presentation Notes.
2. **Have divers complete the Rescue Adventure Dive Knowledge Review.**
3. **Complete these Rescue Diver course skills:**
 - a. **Self-rescue skills: cramp release and alternate air source use**
 - b. **Exercise 1 – Tired Diver**
 - c. **Exercise 2 – Panicked Diver**
 - d. **Exercise 5 – Missing Diver**

Search and Recovery Adventure Dive

Considerations

To conduct the dive, have a small object, large object (maximum 11 kilograms/25 pounds), line and lift bag with rigging.

Performance Requirements

1. Search an area approximately 15 x 15 metres/50 x 50 feet to find a small submerged object, or search until reaching a planned dive limit.
2. Search an area approximately 30 x 30 metres/ 100 x 100 feet to find a submerged object that weighs no more than 11 kilograms/25 pounds, or search until reaching a planned dive limit.
3. Tie knots underwater: bowline, two half-hitches, sheet bend.
4. Use an appropriate lifting device to safely rig and bring to the surface an object that weighs no more than 11 kilograms/25 pounds.

Self-Reliant Adventure Dive

Considerations

1. Use the Self-Reliant Diver Specialty Instructor Guide and have student divers complete the Knowledge Review and all Dive One performance requirements.
2. If you do not have recent dive experience with the diver, in preparation for the dive, generally assess diver knowledge and evaluate the diver inwater for prerequisite skills and comfort needed to complete the dive.
3. Directly supervise divers at a maximum ratio of 8:1. Do not increase this ratio with the use of certified assistants.

Shark Conservation (AWARE) Adventure Dive

Considerations

1. Use the AWARE – Shark Conservation Diver Specialty Instructor Guide, and have student divers complete the Knowledge Review and all Dive One performance requirements.

Sidemount Adventure Dive

Considerations

1. Use the Sidemount Diver Specialty Instructor Guide.
2. Have student divers complete PADI Sidemount section and Knowledge Review One using the PADI *Sidemount and Tec Sidemount Diver eLearning/Manual*.
3. Have divers complete the Sidemount Diver Practical Application prior to the required Confined Water Dive.
4. During the Confined Water Dive, have divers practice with the configuration – either single-cylinder or two-cylinder – that they will use during the Adventure Dive.
5. If divers use single-cylinder sidemount during the Adventure Dive, skills requiring two-cylinder sidemount do not apply.
6. Have student divers complete all Dive One performance requirements. Conduct dive between 6–18 metres/20–60 feet.

Underwater Naturalist Adventure Dive

Performance Requirements

1. Passively observe aquatic life.
2. Maintain neutral buoyancy and body-positioning to avoid negative effects on aquatic organisms.
3. With a buddy, locate and identify at least two aquatic plants (one for fresh water).
4. With a buddy, locate, observe and identify at least four aquatic invertebrate animals (one for fresh water).
5. With a buddy, locate, observe and identify at least five aquatic vertebrate animals (two for fresh water).

Wreck Adventure Dive

Considerations

1. **Directly supervise divers at a maximum ratio of 8:1 or have a certified assistant supervise divers at a maximum ratio of 4:1.**
2. **Do not allow wreck penetration.**

Performance Requirements

1. **Swim on the outside of a wreck while maintaining proper buoyancy. Identify and avoid potential hazards.**
2. **Navigate the wreck to locate the ascent point without surfacing. Use instructor/certified assistant as needed.**
3. **Maintain neutral buoyancy and body position to avoid touching the bottom and the wreck.**

4. Advanced Adventure Diver

4.1 Introduction

The purpose of this course is to give the diver an overview of 5 different specialties, 2 core, and 3 additional SDI Specialties. The two core specialties are SDI Deep and Navigation. One dive, from each of the specialties, may apply toward a complete specialty certification. Overhead environments and non-diving specialties are not allowed, and do not count toward the 3 chosen specialties. If one of the elected specialties is computer nitrox, dry suit, night-limited visibility, full face mask, DPV, search and recovery, and/or Sidemount, the instructor must hold the corresponding SDI Specialty Instructor rating. It is recommended for the student to work on advanced buoyancy during this program, it may even count as one of the five specialties required to receive the Advanced Adventure Diver rating.

4.2 Who May Teach

An active SDI Open Water Scuba Diver Instructor.

4.3 Student to Instructor Ratio

Academic:

1. Unlimited, so long as adequate facilities, supplies and time are provided to ensure comprehensive and complete training of subject matter.

Confined Water (swimming pool-like conditions):

1. N/A.

Open Water (ocean, lake, quarry, spring, river, or estuary):

1. A maximum of 8 students per instructor. It is at the instructor's discretion to reduce this number as conditions or chosen specialty dictate (unless chosen specialty dictates a lower ratio i.e., for DPV it is 2:1).
2. The instructor has the option of adding 2 more students with the assistance of an active Assistant Instructor or Divemaster.
3. The total number of students an instructor may have in the water is 12 with the assistance of 2 active Assistant Instructors or Divemasters, unless chosen specialty states lower numbers).

4.4 Student Prerequisites

4. 1. SDI Open Water Scuba Diver, SDI Junior Open Water Scuba Diver, or equivalent; juniors can only take specialties approved for their age.
5. Minimum age 18, 10 with parental consent. Junior students are to train and dive under the direct supervision of a parent, guardian, or active dive professional.

4.5 Course Structure and Duration

Open Water Execution:

1. Five dives are required with complete briefs and debriefs by the instructor.
2. One dive must be deeper than 18 Metres/60 Feet but not deeper than 30 Metres /100 Feet; *divers between the ages of 10 through 14 cannot exceed 21 Metres/70 Feet.*
3. One dive must be a navigation dive.
4. Dive plans must include surface interval, maximum no-decompression time, etc. to be figured out and logged.
5. Each dive will be the first dive of each of the specialties i.e., dive one of deep course, dive one of navigation course, etc.
6. All dives are to be under the direct supervision of an active SDI Instructor.

Course Structure:

1. SDI allows instructors to structure courses according to the number of students participating and their skill level.

4.6 Administrative Requirements

Administrative Tasks:

1. Collect the course fees from all the students.
2. Ensure that the students have the required equipment.
3. Communicate the schedule to the students.
4. Have the students complete the:
 - a. *SDI Liability Release and Express Assumption of Risk Form*
 - b. *SDI Medical Statement Form.*

Upon successful completion of the course the instructor must:

1. Issue the appropriate SDI certification by submitting the *SDI Diver Registration Form* to SDI Headquarters or registering the students online through member's area of the SDI website.

4.7 Training Material

Required Material:

1. *SDI Advanced Adventure Diver Manual and IQ Review Booklet* (or eLearning course)
2. *SDI Advanced Adventure Diver Instructor Guide*.

Optional Materials:

1. *SDI Advanced Diver PowerPoint Presentation*

4.8 Required Equipment

Basic open water scuba equipment as described in section three of this manual, and any other equipment that may apply to the chosen specialties.

4.9 Approved Outline

The outline that is to be used for this specialty is an abridged version of each of the 2 core and 3 chosen specialties. The material covered must be an overview and introduction. This is just an outline and is not intended to be taught in any particular order.

Deep Diving:

1. Diving Tables and Computers:
 - a. History of dive tables and computers:
 - i. No-decompression.
 - ii. Use of the decompression schedule according to your computer.
 - iii. Safety stops.
 - b. Practical problem solving.
2. Specialty equipment for deep dives:
 - a. Cylinders; different sizes.
 - b. Regulators.
 - c. Buoyancy compensator device (BCD).
 - d. Redundant gas supplies.

3. Physics and physiology for deep divers:
 - a. Special considerations for pressures greater than 3 atmospheres (ATA):
 - i. Air consumption.
 - ii. Carbon dioxide (CO₂) factors.
 - iii. Nitrogen narcosis.
 - iv. Oxygen (O₂) toxicity.
 - v. Decompression sickness.
4. Emergency Procedures for Deep Divers:
 - a. Usage and techniques for safety cylinders.
 - b. Recompression chamber listing for area.
5. Review of First Aid:
 - a. Oxygen treatment.
 - b. Treat for shock.

Navigation:

1. The Aquatic Environment:
 - a. Vision.
 - b. Light.
 - c. Sound.
 - d. Heat loss.
 - e. Tides.
 - f. Currents.
 - g. Waves.
 - h. Surge.
2. Natural Navigation:
3. Bottom contours.
4. Depth.
5. Amount of light.
6. Surge.
7. Currents.
8. Underwater objects; rocks, wrecks, etc.
9. Compass:

10. Types:
11. Analog.
12. Digital.
13. Features:
14. Lubber line.
15. Bezel.
16. Luminous dial.
17. Use of compass:
18. Out and back.
19. Squares.
20. Triangles.
21. Estimating Distance Underwater:
22. Kick cycles.
23. Time.

4.10 Required Skill Performance and Graduation Requirements

Students are required to successfully complete the following:

1. Students must perform the skills listed for dive 1 for each of the 2 core, and 3 chosen specialties. Specific course outlines for the respective specialties are listed later in this section of the SDI Standards.

Deep Dive:

1. Open Water Dive 1:
 - a. Test and check all equipment, i.e., depth gauges, bottom timers/watches and computers.
 - b. Familiarization with area.
 - c. Descend to planned depth and do not exceed any pre-planned limits.
 - d. Dive according to plan at a depth limited to 30 Metres/100 Feet for first dive. *Divers between the ages of 10 and 14 cannot exceed 21 Metres/70 Feet.*
- e. Ascend to safety stop.

Navigation Dive:

1. Open Water Dive 1:
 - a. Skills are generally done with more success if practiced on the surface from shore. Using the shore or descent line as a starting/reference point makes keeping track of students easier.
 - b. Plan dive.
 - c. Enter water from boat or shore.
 - d. Practice out and back technique on surface.
 - e. Squares and triangles on surface.
 - f. Perform square on bottom.
 - g. Perform a triangle on the bottom.
 - h. Ascend and exit.