

The Advanced Diver Course

This section outlines the Advanced Diver course and provides guidance and definitions specific to the Advanced Diver grade. This qualification relies more heavily on the accumulation of extensive diving experience in a wide range of conditions. The definitions of the experience requirements are therefore more comprehensive and, in some cases prescriptive, while incorporating sufficient flexibility to make them as universally applicable as possible. 'Formal' Open Water lessons are confined to reviewing essential diving and safety skills.

Definition of a Advanced Diver

An Advanced Diver is defined as a diver who is comprehensively trained, experienced and responsible and who can manage and supervise

- a wide range of adventurous and challenging diving activities
- branch diving expeditions to explore unfamiliar locations
- branch diving activities including dives utilising developing technology and techniques

While Advanced Divers do not necessarily need to be qualified to use emerging technologies themselves, they need to know sufficient about them to understand how to safely incorporate them within branch diving.

Advanced Diver Course Outline

The Advanced Diver Course consists of the following elements:

- four classroom lessons
- a theory assessment
- two dry practical lessons
- two open water lessons
- twenty dives (which may include the open water lessons), in a range of conditions, since qualifying as a Dive Leader

Dive Leader training supplemented 'formal' lessons with a more extensive broadening of divers experience. This is further extended in the Advanced Diver course, which has relatively few 'formal' practical lessons and is much more heavily based on a further structured broadening of experience. The definitions of the qualifying dives given below therefore ensure not just a broadening of experience, but sufficient consolidation of that experience.

Instructor Requirements

Advanced Diver Training is required to be carried out by, or supervised by, a suitably qualified BSAC Instructor (see below for detail).

- Practical Instructors, Theory Instructors, Assistant Diving Instructors and Assistant Open Water Instructors do not hold the

appropriate Instructor qualifications to teach this Diving Grade.

- **Open Water Instructors** who are themselves Advanced Divers - can teach most elements with the exceptions noted below.

The following lessons must be carried out either by an **Advanced Instructor**, or by an Assistant Advanced Instructor under the on-site supervision of an Advanced Instructor:

- AT1 The Role of the Advanced Diver
- AP1 Expedition Planning
- AP2 Dive Planning and Management

Student/Instructor Ratios

Classroom lessons can normally be conducted by one instructor, constraints of classroom size dictating the maximum number of students. Where additional considerations apply, for instance for those classroom lessons involving skill practice, the appropriate ratios are detailed in the relevant lesson notes.

Practical and Open Water lessons should generally be conducted on a one-to-one basis. For some elements of the open water lessons, additional divers will be required to provide realistic rescue management scenarios.

Equipment Configuration

Advanced Divers will be expected to be able to undertake a wide range of types of dives and in a wide range of conditions, for all of which no single equipment configuration will be appropriate. Instructors should monitor students' equipment to ensure that they do not fall into the habit of just using the same configuration all the time, but are continually evaluating whether it is appropriate to the type of diving being carried out.

In particular, aspects which should be reviewed should include:

- adequacy of main breathing gas supply
- adequacy of alternative breathing gas supply to cope with a main gas supply failure at the most critical point in the dive
- consideration of appropriate breathing gas for each stage of the dive
- AS visible and readily accessible by buddy
- weight properly adjusted for the configuration
- ancillary equipment (gauges, hoses, reels, lifting bags etc.) stowed securely to avoid loops or dangling items which could snag, drag along the bottom or become an impediment in an emergency

Instructors should wear a configuration of equipment compatible with that of the student. Instructors should be equipped with an AS supplied from an independent breathing gas supply, which

has adequate capacity to cope with a failure of either their own, or their student's, main breathing gas supply at the most critical point in the dive.

For deeper dives where the use of mixed gas is appropriate, such gas mixes may be used in open circuit breathing equipment by instructors and/or students during Advanced Diver lessons and experience dives provided that they:

- hold a BSAC recognised qualification
- follow BSAC recommended practices

Rebreathers may be used by instructors and/or students during Advanced Diver lessons and experience dives provided that the rebreathers divers:

- have completed a recognised training course for the type of rebreather being used
- have at least 20 hours diving experience using the rebreather since completing their rebreather training course
- follow BSAC recommended rebreather diving practices
- are buddied by a diver appropriately experienced in the implications of accompanying a rebreather diver, as recommended by the BSAC

Open Water Conditions

The build-up of experience of diving in a wide range of conditions is a major and important part of Advanced Diver. Dive sites should include those encompassing a wide variety of topography and underwater life, and which have significant water movement due to waves or current. Water conditions should also include a range of underwater visibilities. Access from shore and different types of boats should be included.

Lesson Sequencing

The following integrated sequence of lessons is structured to ensure a balanced build-up of knowledge and skills relative to the student's increasing diving experience and, to provide a variety between theory and practical lessons.

Classroom Lesson	AT1	The Role of the Advanced Diver
Classroom Lesson	AT2	Advanced Diving
Classroom Lesson	AT3	Organising Diving from Different Platforms
Practical Lesson	AP1	Expedition planning
Classroom Lesson	AT4	Review of Diving Conditions and on-site First Aid
Open Water Lesson	A01	Diving and Rescue Skills Review

Open Water Lesson	A02	Rescue Skill & Management Review
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Practical Lesson	AP2	Dive Planning and Management
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Open Water lessons

Some Open Water lessons involve multiple ascents. Decompression considerations dictate that they be performed at the start of diving activities and before diving to any greater depth.

Practice ascents which may exceed the normal ascent rate, such as AS ascents or a CBL, should either be terminated at a depth of 6m, or interrupted at 6m, followed by a normal ascent to the surface where the exercise can be resumed.

Instructors should ensure that the impact on decompression considerations for the remainder of the particular lesson, and on any subsequent diving activities, are taken into account.

Experience dives

The Advanced Diver syllabus includes open water lessons and experience dives which should total a minimum of 20 dives and 600 mins. underwater time since qualifying as a Dive Leader.

To ensure that students receive experience in a range of conditions, the open water dives must include the conditions in the following list. To ensure consolidation of the experience requirements, each of the conditions should be experienced on at least three dives:

- **planned decompression dive** - dive involving at least two planned decompression stops, of a total of at least 6 mins., using an appropriate equipment configuration and decompression technique
- **dive in tidal waters** - dive involving a direct descent following a shot line, to dive on a specific site in a slack water window. Ascent either via shot line or under DSMB as appropriate to tidal conditions at end of dive
- **drift dive** - dive to a minimum depth of 15m in water moving at a speed which precludes a return to the point of entry

Only one of the above conditions may be logged per dive.

In addition to the above, a further six dives should include at least three of the following conditions:

- **navigation dive** - dive requiring navigation around a site, involving multiple changes of direction throughout and returning to the entry point. Compass and/or pilotage/and/ or distance line techniques used as appropriate. Minimum duration 30mins.
- **search dive** - A dive involving the utilisation

of underwater search techniques.

- **no clear surface dive** - A dive involving no clear surface, either cavern, wreck penetration or ice diving.
- **mixed gas dive** - A dive involving use of mixed gas, either closed circuit rebreather or open circuit.
- **advanced decompression dive** - A dive involving advanced decompression techniques and emergency gas deployment using decompression trapeze or lazy shot.
- **surface location dive** - A dive involving the surface location of an unknown site using surface searching techniques, followed by suitable precautions when diving an unknown site.

Of the twenty dives:

- **at least ten should be carried out from boats.** Of these, at least three should be carried out from boats of at least 9m in length, and at sites in exposed locations with surface water conditions producing significant boat motion
- **on at least ten the student should act as dive leader**
- **at least six should show depth experience greater than 30m**
- **on at least five occasions the student should act as Dive Manager** (including taking responsibility for carrying out all planning activities):
 - at least two should be full day diving activities, to sites which are unknown to the student Dive Manager (Note; Practical lesson AP2 may qualify as one of these)
 - at least one should be for a duration of at least two days, involving the need for organising logistics and suitable accommodation, as well as planning and management of the diving activities, including site location. (Note: this should follow after completion of practical lesson AP1)
 - the remaining two may be to either known or unknown sites

Performance Assessments and Standards

Advanced Diver training includes a specific theory assessment and continuous assessment of the practical skills.

Practical Assessments

As in the training for the previous diver grades, where specific performance standards are required to be achieved, these are identified in the lesson notes by the words "competent and confident".

Again appropriate performance standards are incorporated at the end of the relevant lesson notes.

During the lessons, students should also be monitored for any deterioration in skills learned during training for previous diver grades. Where necessary corrective instruction should be provided to re-establish the appropriate performance standard.

At this level, divers are seen as role models by the less experienced, and hence the competence with which skills are performed should be such as to set an appropriate example.

Theory Assessment

The theory assessment can be undertaken any time after the completion of the classroom lessons, but must be successfully completed before the award of the Advanced Diver qualification. A pass mark of 70% must be achieved.