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**Recreational diving services —  
Requirements for the training of scuba  
instructors —**

**Part 2:  
Level 2**

*Services relatifs à la plongée de loisirs — Exigences concernant la  
formation des moniteurs de plongée subaquatique —*

*Partie 2: Niveau 2*



Reference number  
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Case postale 56 • CH-1211 Geneva 20  
Tel. + 41 22 749 01 11  
Fax + 41 22 749 09 47  
E-mail [copyright@iso.org](mailto:copyright@iso.org)  
Web [www.iso.org](http://www.iso.org)

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## Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see [www.iso.org/directives](http://www.iso.org/directives)).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see [www.iso.org/patents](http://www.iso.org/patents)).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: [Foreword - Supplementary information](#)

The committee responsible for this document is Technical Committee ISO/TC 228, *Tourism and related services*.

This second edition of ISO 24802-2 cancels and replaces the first edition (ISO 24802-2:2007) which has been technically revised.

ISO 24802 consists of the following parts, under the general title *Recreational diving services — Requirements for the training of scuba instructors*:

- *Part 1: Level 1*
- *Part 2: Level 2*

## Introduction

This part of ISO 24802 is one of a series of International Standards relating to recreational diving services, which have been prepared with the aim of establishing a set of specifications for safety practices and the provision of services.

These International Standards specify:

- necessary levels of experience and competency of scuba divers and scuba instructors;
- safety practices and requirements for recreational scuba diving service providers appropriate to the different diving levels.

The requirements specified are minimal; they do not preclude the provision of additional training or the evaluation of additional competencies by a service provider. These International Standards represent a tool for comparison of existing (or future) qualifications of scuba instructors. They do not represent a course programme, nor do they imply that course programmes and scuba instructor qualifications issued by different nations or training organizations are required to correspond to these levels.



# Recreational diving services — Requirements for the training of scuba instructors —

## Part 2: Level 2

### 1 Scope

This part of ISO 24802 specifies the competencies required of a scuba instructor in order to obtain a scuba instructor qualification from a training organization attesting that he/she has met or exceeded scuba instructor level 2, and specifies evaluation criteria for these competencies.

It also specifies the conditions under which training is provided, in addition to the general requirements for recreational diving service provision in accordance with ISO 24803.

This part of ISO 24802 applies to training and evaluation in recreational scuba diving.

### 2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 24801-1:2014, *Recreational diving services — Requirements for the training of recreational scuba divers — Part 1: Level 1 — Supervised diver*

ISO 24801-2:2014, *Recreational diving services — Requirements for the training of recreational scuba divers — Part 2: Level 2 — Autonomous diver*

ISO 24801-3:2014, *Recreational diving services — Requirements for the training of recreational scuba divers — Part 3: Level 3 — Dive leader*

ISO 24802-1, *Recreational diving services — Requirements for the training of scuba instructors — Part 1: Level 1*

ISO 24803, *Recreational diving services — Requirements for recreational scuba diving service providers*

### 3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

#### 3.1

##### **training organization**

entity providing training systems and issuing qualifications for recreational diving, and which is responsible for the implementation and quality management of training

Note 1 to entry: Entity can include scuba diving federations and scuba diver training agencies.

#### 3.2

##### **confined water**

swimming pool with a depth appropriate to the activity or body of water, offering similar conditions with regard to visibility, depth, water movement and access

### 3.3

#### **open water**

body of water significantly larger than a swimming pool, offering conditions typical of a natural body of water

## **4 Competencies of a scuba instructor at level 2**

Scuba instructors at level 2 shall be trained such that when evaluated in accordance with [Clause 13](#) they are deemed to be qualified to:

- plan, organize and conduct dives and lead other recreational scuba divers of all levels in open water, including rescue activities;
- teach and assess students up to scuba diver level 1, level 2 and level 3 in accordance with ISO 24801-1, ISO 24801-2 and ISO 24801-3 respectively;
- supervise level 1 scuba instructors in accordance with ISO 24802-1;
- plan, organize and conduct scuba diver training courses;
- with suitable additional training or experience to plan, organize and conduct appropriate speciality or diving operational activities.

If diving and environmental conditions are significantly different from those previously experienced, a scuba instructor requires an appropriate orientation with regard to local diving and environmental conditions in order to meet the above mentioned competencies.

## **5 Prerequisites for training**

### **5.1 Practical experience**

The scuba instructor-trainer shall ensure that scuba instructor candidates have qualification to at least scuba diver level 3 with additional practical experience gained after level 3 qualification in accordance with to ISO 24801-3 prior to their evaluation in accordance with [Clause 13](#).

### **5.2 Health requirements**

Scuba instructor candidates shall be medically screened as suitable for diving in accordance with procedures laid down by a competent medical authority. If such procedures are not specified scuba instructor candidates shall provide evidence of a diver medical examination not older than one year unless the medical authority which has carried out the examination specifies longer validity.

## **6 Scuba instructor candidate information**

Information in accordance with ISO 24803 shall be made available to the students prior to, or during the first class meeting.

## **7 Required theoretical knowledge**

Scuba instructor candidates shall have extensive theoretical knowledge regarding the scuba skills specified in ISO 24801-1, ISO 24801-2 and ISO 24801-3 and sufficient knowledge to be able to give presentations on topics from ISO 24801-1:2014, Clause 7, ISO 24801-2:2014, Clause 7, and ISO 24801-3:2014, Clause 7.

Additionally, scuba instructor candidates shall have appropriate knowledge of the following issues:

- medical and psychological contraindications for scuba diving;



- the training requirements for scuba diver level 1 in accordance with ISO 24801-1, level 2 in accordance with ISO 24801-2 and level 3 in accordance with ISO 24801-3 and level 1 scuba instructor in accordance with ISO 24802-1;
- the duty of care of a scuba instructor, including codes of conduct and safe practices;
 

NOTE An example for a code of conduct and safe practices is given in [Annex A](#).
- safety regulations affecting scuba diving service provision (e.g. regulations affecting schools, centres, clubs, organizations);
- methods of safely filling diving cylinders including relevant local regulations concerning cylinder working pressures and testing requirements;
- relationships and communication with relevant public authorities (e.g. police, customs, rescue organizations, fire-brigade);
- administration within a diving centre/club/training organization with regard to diving and training activities;
- teaching principles and methodology;
- selection of dive sites using appropriate navigational aids (e.g. maps, navigational charts, tide tables).

## 8 Personal scuba skills

Scuba instructor candidates shall be able to perform all of the personal scuba skills from level 1, level 2 and level 3 scuba diver in accordance with ISO 24801-1, ISO 24801-2 and ISO 24801-3, respectively, to demonstration quality.

## 9 Theoretical teaching skills

Scuba instructor candidates shall be able to conduct lesson preparation, planning and delivery of theoretical teaching presentations.

## 10 Teaching and supervision of scuba skills

Scuba instructor candidates shall be able to conduct in-water lessons for students at level 1, level 2 and level 3 from the topics outlined in ISO 24801-1, ISO 24801-2 and ISO 24801-3. Evaluation shall include activities demonstrating skills relevant to confined and open water. The open water activities shall be performed at an open water site representative of local conditions.

Lesson elements to be evaluated shall include:

- preparation;
- planning;
- briefing and debriefing;
- group control and supervision;
- skill demonstration;
- problem recognition and solving;
- student evaluation.

## 11 Emergency procedures

### 11.1 Diver rescue

Scuba instructor candidates shall be competent in diver rescue skills including:

- recognition of emergency situations (e.g. loss of breathing gas supply, lack of response);
- controlled casualty recovery from depth;
- effective emergency surface actions;
- casualty recovery from the water;
- emergency situation management including co-ordination with emergency services in accordance with local emergency procedures.

### 11.2 First aid

Students shall complete a course/courses in first-aid and cardiopulmonary resuscitation (CPR) approved by the training organization and have a valid qualification or certificate.

### 11.3 Oxygen administration

Scuba instructor candidates shall be competent in the emergency administration of oxygen. This shall include knowledge of the medical principles involved and practical use of an emergency oxygen unit.

## 12 Scuba instructor-trainers

Scuba instructor-trainers shall be responsible for instructor training and qualification.

Scuba instructor-trainers shall be scuba instructors of senior standing and of higher qualification than a level 2 scuba instructor and shall have received specific training in the education and development of scuba instructors.

Scuba instructor-trainers shall have an extensive knowledge of pedagogy and relevant educational systems and shall be qualified and sanctioned by a training organization or competent public authority as being able to teach and evaluate scuba instructors.

Scuba instructor-trainers may take the role of trainers or examiners of scuba instructor candidates in accordance with the procedures defined by such training organizations or competent public authorities.

The process of training and qualification of scuba instructor candidates shall involve at least one scuba instructor-trainer and one level 2 scuba instructor of senior standing.

## 13 Evaluation

### 13.1 Minimum age

The minimum age for receiving qualification as level 2 scuba instructor shall be 18 years.

### 13.2 Minimum practical experience

Scuba instructor candidates shall have met all requirements for a level 1 scuba instructor in accordance with ISO 24802-1 and a level 2 scuba instructor in accordance with this part of ISO 24802 prior to qualification.

Scuba instructor candidates shall have gained teaching experience by playing the role of an instructor in a structured series of training sessions (in the classroom and in confined and open water) which will expose them to a comprehensive range of duties and problems they will be expected to encounter once qualified. Situations they will be exposed to should include simulated in-water emergencies, group dynamics and behavioural problems and typical learning difficulties.

Scuba instructor candidates shall have gained sufficient diving experience to demonstrate competency in all of the abilities specified in this part of ISO 24802.

### 13.3 Theoretical knowledge

Scuba instructor candidates shall satisfactorily demonstrate to a scuba instructor-trainer knowledge of scuba diving training by taking and passing an examination. This examination shall test theoretical knowledge in accordance with [Clause 7](#) and knowledge of skills in accordance with [Clauses 8, 9, 10](#) and [11](#).

### 13.4 Teaching techniques

Scuba instructor candidates shall satisfactorily demonstrate to a scuba instructor-trainer their ability to prepare and present theoretical and practical presentations that are technically correct, of an appropriate content and are delivered in an effective manner suited to the students' needs.

An example for the assessment of teaching techniques and supervision of scuba skills is given in [Annex B](#).

### 13.5 Teaching and supervision of scuba skills

Scuba instructor candidates shall satisfactorily demonstrate to a scuba instructor-trainer their ability to perform, teach and evaluate scuba skills in accordance with ISO 24801-1, ISO 24801-2 and ISO 24801-3.

This evaluation shall include both confined water and open water activities. Scuba instructor candidates shall not be given information prior to the assessment on the precise exercise to be used.

An example for the assessment of teaching and supervision of scuba skills is given in [Annex B](#).

### 13.6 Supervision and guidance of diving activities

Scuba instructor candidates shall demonstrate to a scuba instructor-trainer skills in group control and supervision of students' diving activities including responsible judgement on relevant site criteria such as weather, depth, visibility, water movement and level of supervision required.

### 13.7 Emergency procedures

Scuba instructor candidates shall demonstrate to a scuba instructor-trainer skills selected from those specified in [Clause 11](#) by completing at least one simulated open water rescue.

## Annex A (informative)

### Code of conduct for scuba instructors

#### A.1 Instructor code of practice

As a dive professional, you have a very important obligation to your students, clients and all those who come to you to be taught or led underwater: You are responsible for the safety of others.

As a dive professional, you should agree to the following.

- a) Put the safety of diving clients and students as your first priority and responsibility. In doing so, abide by the requirements and intent of your diving organization's standards and procedures, while applying your best judgment during the courses and programmes you conduct.
- b) Although scuba diving is a reasonably safe activity when safety rules are followed, the risk/consequence of scuba diving can lead to very serious injuries. Be safety minded, safety conscious and practice instructing and dive mastering professionally.
- c) Perform a personal readiness self-assessment before you teach or lead others on dives.

This includes evaluating your physical health and fitness for diving as well as your ability to supervise and respond to diver emergencies on that day and at that location. Evaluate the dive conditions and environment and determine if you are ready and familiar enough with it to teach or lead dives there. Assess your knowledge readiness to teach or lead dives on any given day, in order to make sure that you are familiar with the standards, latest updates and teaching tools for that programme you are teaching, and that you are aware of the readiness and abilities of your student divers.

- d) When teaching, repetition is important for mastery and long term skill retention.  
Mastering basic skills and breath control in a variety of conditions takes time and practice. Help those you teach and supervise by guiding them through this learning process.
- e) Each person has an individual state of mind and comfort level that can be very different from yours, and can vary greatly between divers in a group. Be willing to cancel a dive for the group or an individual at any time to err on the side of safety.
- f) Be watchful for signs of diver stress and anxiety, and act quickly and appropriately when you see them.
- g) Employ effective group control measures in the water, particularly when supervising novices and children. Carry out frequent head counts.
- h) Conduct yourself and your diving-related activities in a professional manner.
- i) Comply with the intent of your organization's diver code and safe diving practices while teaching and supervising.
- j) Not disparage the other dive industry professionals or organizations.
- k) Respect and reinforce any depth and supervisory restrictions for youth, divers with disabilities or other restricted certifications as displayed on their certification cards.
- l) Follow a strict code of conduct and abide by the requirements and intent of the Youth Leader's Commitment (see Clause [A.2](#)) whenever teaching or supervising children.

- m) Follow a professional code of practice toward the environment and in all diving activities.

## **A.2 Instructor Youth Code of Practice**

- a) Look after the child's health, safety and welfare.
- b) Ensure appropriate supervision during all instructional activities.
- c) Whenever possible, meet the child's parents or guardians and share programme goals and objectives.
- d) Strive to keep parents or guardians involved and informed through verbal reports and updates as often as possible.
- e) Treat children, parents or guardians with respect regardless of age, race, gender and religious affiliation.
- f) Honour commitments made to children.
- g) Discuss disciplinary problems with parents or guardians.
- h) Do not engage in inappropriate contact with children.
- i) Respect a child's rights to privacy and intrude only when health and safety demand.
- j) Whenever possible, ensure two adults are with children.

## Annex B (informative)

### Example of assessment of teaching and evaluation competencies when teaching a level 3 scuba diver course

#### B.1 Evaluation areas

**Table B.1 — Theory lesson**

Theory lesson	Scuba instructor candidate evaluation areas	Method of assessment
Equipment: Regulators	<ol style="list-style-type: none"> <li>1) Candidates introduced themselves and the topic and explained the importance/value of subject.</li> <li>2) Candidate defined learning objectives (what students should know by end of lesson).</li> <li>3) Candidate outlined content of lesson and how students should participate.</li> <li>4) Lesson content - the candidate shouldto:               <ol style="list-style-type: none"> <li>a) describe what is meant by open circuit scuba, semi-closed circuit scuba and closed circuit scuba;</li> <li>b) explain how an open circuit regulator works;</li> <li>c) describe common regulator design types and the advantages/disadvantages of each;</li> <li>d) describe what is meant by fail-safe with respect to regulators, and the advantages of it;</li> <li>e) explain the purpose of a regulator environmental seal and state when it should be used;</li> <li>f) describe the differences between balanced and unbalanced regulators;</li> <li>g) identify when a regulator requires servicing/inspection and assess basic functionality.</li> </ol> </li> <li>5) Information was presented in a logical sequence.</li> <li>6) Candidate showed the relationship of information to other knowledge students already possess.</li> <li>7) Candidate summarized information as key points, reinforced the value of the information and explained when it would be applied by students.</li> <li>8) Candidate used appropriate training aids to explain the subject including sample regulator systems.</li> <li>9) Candidate presented the information in a clear manner and involved students by asking questions.</li> <li>10) Candidate adapted their teaching method in accordance with students' input and needs.</li> <li>11) Candidate tested students' understanding of the information.</li> </ol>	Observation of simulated or actual lessons by an scuba instructor-trainer.
<p><b>NOTE</b> The above given example can be applied to any theory presentation with the exception of point 4 which will vary in accordance with the content of the lesson.</p>		

Table B.2 — Practical lesson

Practical lesson	Scuba instructor candidate evaluation areas	Method of assessment
Dive planning and preparation	<ol style="list-style-type: none"> <li>1) Candidate introduced themselves and the topic and explained the importance/value of subject.</li> <li>2) Candidate defined learning objectives (what students should be able to do by end of lesson).</li> <li>3) Candidate explained how the practical session will be conducted and described the students' roles in the lesson.</li> <li>4) Candidate described how communications will be made during the session.</li> <li>5) Candidate described relevant emergency procedures.</li> <li>6) Candidate demonstrated as appropriate how to:               <ol style="list-style-type: none"> <li>a) conduct environmental and diver assessments, and take other appropriate supervisory steps based on the assessments;</li> <li>b) prepare an emergency plan appropriate for the diving location and dive team competencies and experience;</li> <li>c) conduct an appropriate pre-dive briefing for a dive site for assigned dive team;</li> <li>d) respond to or prevent diver problems appropriately;</li> <li>e) select and prepare descent/ascent aids.</li> </ol> </li> <li>7) Candidate observed students demonstrate items 6) a) to e).</li> <li>8) Candidate responded to student problems appropriately and corrected students as necessary.</li> <li>9) Candidate ensured that students were properly supervised and monitored during the session.</li> <li>10) Candidate presented a debriefing following the session which included feedback to students as to their performance compared to the learning objectives, an analysis of problems that occurred and solutions to such problems and reinforced the value and application of the topic.</li> </ol>	Observation of simulated or actual lessons by a scuba instructor-trainer.
<p>NOTE The above given example can be applied to any practical presentation with the exception of point 6 which will vary in accordance with the content of the presentation.</p>		

## B.2 Example of scuba instructor level 2 knowledge

**Topic:** Diving physics

**Subtopic:** Light, heat and sound in water

The scuba instructor candidate shall be able to answer the following questions. The scuba instructor candidate shall also have a comprehensive understanding of why each of these phenomena occur and the diving related consequences.

- a) Why does water dissipate body heat faster than air does, and at what rate does it do so?
- b) What effect does water's ability to dissipate heat have on a diver?
- c) What does light do when it passes from air into water, or vice-versa, and how does this affect a diver?
- d) What is refraction?
- e) Why does sound travel faster in water than in air, and how much faster in water?
- f) How does the speed of sound in water affect hearing?
- g) What effect does water turbidity have on visibility?

- h) How will open water visibility affect student control considerations?
- i) What training aids may be used to demonstrate the above phenomena?

### **B.3 Example for level 1 scuba instructor supervision**

When supervising a level 1 scuba instructor during a water training session, the level 2 scuba instructor should observe the level 1 scuba instructor and ensure that the following aspects of the session are conducted properly. Any errors that may affect safety must be corrected immediately, and a debriefing session for the level 1 scuba instructor should in any case be conducted in order to provide constructive criticism.

The level 1 scuba instructor might be asked to:

- organize the pre-dive set-up of students' equipment for confined water and open water training;
- coordinate student movement and control during confined water and open water training dives;
- supervise students not receiving the immediate attention of the scuba instructor during confined water training;
- account for buddy teams entering and leaving the water by checking them in and out of the water;
- assist a student overcome a learning difficulty in confined water;
- assist in the preparation of an open water training site;
- conduct environmental and diver assessments for supervising divers not in training and include recommendations based on the assessment in a pre-dive briefing, and take other appropriate steps based on the assessments;
- conduct an appropriate pre-dive briefing for a dive site.





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