



OPEN WATER DIVER STANDARDS

V0424

Special consideration points

- *This is the first mandatory level of the ACUC training ladder.*
- *Open Water Divers should not exceed, **during training**, the depth of 18 meters / 60 feet.*
- *This course is equivalent to ISO Autonomous Diver (24801-2) and RSTC Open Water Diver.*
- *Direct supervision means that a qualified ACUC Instructor must be present*
- *Indirect supervision means that although it is not necessary for a qualified instructor to be present during training, the training must be nevertheless evaluated by a qualified instructor*

Introduction

The ACUC Open Water Diver (OWD) is the **first** mandatory level on the ACUC training ladder. Parts of this course can be assisted by any ACUC Divemaster or higher, under direct supervision of at least an ACUC instructor with the level of Entry Level Instructor, and must be evaluated and certified by an ACUC Entry Level Instructor or higher level.

This is an ACUC International standard and therefore is always subject to the different national or local legislations. In cases where legislations exist that differ from this standard, the ACUC country or area delegation if it exists, must request in writing to the ACUC head office a “**Deviation**” from this standard to satisfy the legislation of the area, supporting their request with the appropriate documentation. Deviations, if requested, to be considered valid, must appear at the end of each specific standard document. In cases where the local or national legislations are more restrictive than the ACUC Standard, then the local legislation will prevail, but if the ACUC Standard is more restrictive, then the ACUC Standard will prevail, because by complying with the more restrictive ACUC Standard, logically the local legislation will be also complied with.

Regarding required training hours, none are specified because these could vary depending on many factors (number of candidates, diving environment, if the course is face to face or e-learning, etc), therefore the training hours needed are dependent on the **fulfilment of learning objectives**. In the ACUC manuals and documents where hours are specified, these are only to be considered recommendations.

1. Scope

This Standard specifies safety related minimum competencies to be achieved in recreational **scuba training** at the ACUC Open Water Diver level. This Standard applies only to **contractual training** and certification in recreational scuba diving.

2. Definitions

For the purposes of the ACUC standards, the following definitions apply. Please note that not all terms shown next might appear in any one specific standard.

2.1 ACUC: Entity providing recreational scuba diving training systems and certification.

2.2 basic equipment: Equipment consisting of the following items:

- Mask
- Fins
- Snorkel

2.3 breathing gas: Appropriate mixture of oxygen and nitrogen.

2.4 certification: Confirmation that a student has completed all requirements of a course according to the specific standard, as issued by ACUC.

2.5 cold water: Water less than 10°C / 50°F from its highest average temperature or water of 10°C / 50°F or less

2.6 competencies: What a diver can do once certified

2.7 confined spaces: condition that applies when there is no direct access to the surface, such inside a wreck, cave, etc.

2.8 confined water: Swimming pool with a depth appropriate to the activity, or body of water that offers similar conditions (maximum depth 6 meters)

2.9 diving equipment: Equipment consisting of the following items:

- Mask,
- Fins,
- Snorkel,
- Cylinder,
- Regulator,
- Alternative breathing gas system, which could range from a simple octopus system to a duplicate breathing system with a separate breathing gas supply,
- Cylinder-support-system and buoyancy control device including (if appropriate) a quick release weight system,
- Submersible pressure gauge (breathing gas pressure monitor),
- Means to measure depth and time and to safely limit exposure to inert gas,
- Diving suit (if appropriate).

Note: Specific environments may require appropriate additional equipment (e.g. an underwater navigational aid, knife/cutting device).

2.10 dry specialty: Specialty course where no water training takes place, such as for example, First Aid, Oxygen Administration, etc

2.11 knowledge levels:

- Basic: knows how...
- Intermediate: knows how and why...
- Advanced: knows how, why and also, knows how to teach it...

2.12 non certification scuba course: Scuba course where the participants do not receive an ACUC certification at the end of the course, such as for example, scuba introduction, scuba refreshment, scuba buoyancy, etc

2.13 open water: Body of water significantly larger than a swimming pool offering conditions typical of a natural body of water encountered in the region where training takes place.

2.14 prerequisites for training: What a diver needs or conditions to be met prior to start training

2.15 reduced visibility: condition that applies when diving at night or when visibility is less than an arm's length, for whatever the reason

2.16 scuba: Self-contained under-water breathing apparatus.

2.17 scuba instructor: A qualified individual, certified by ACUC to teach, evaluate and certify divers.

2.18 theory knowledge: knowledge imparted in a dry environment (classroom, pool deck, etc)

2.19 training definitions:

- To observe: to be an observer in a course but without any type of participation
- To assist: besides the above, to assist in the training of a course under the direct supervision of a higher level instructor

- To train: besides all of the above, to train in a course without the need of a higher level instructor's supervision
- To evaluate: besides all of the above, to evaluate by one self or with other evaluators, candidates' performances
- To certify: besides all of the above, to issue candidates' certifications

2.20 training open water dive: open water training experience under direct supervision of a qualified instructor, comprising at least the following activities:

- Briefing
- Preparation to dive
- Pre-dive checks
- Entry into water
- Descent procedures
- Under-water activity
- Ascent and surfacing procedures
- Exit from water
- Debriefing
- Post dive procedures
- Recording the dive.

2.21 water skills: knowledge imparted inside a wet environment (pool water, sea water, etc)

3 Competencies

An ACUC Open Water Diver will be trained to have sufficient competencies through knowledge, skills, and experience to dive with other certified divers of any level in open water. ACUC Open Water Divers will dive within the following parameters:

- Do not do dives where mandatory decompression stops are needed.
- Only dive when appropriate surface support is available.
- Diving under conditions that are equal to or better than the conditions in which they were trained and, if significantly different, seek professional advice and supervision for diving in the new conditions (conditions include significantly different equipment also).

If accompanied by an ACUC instructor, a certified ACUC Open Water Diver can gain progressive experience beyond these parameters and develop proficiency managing dives with more challenging conditions designed to earn higher certifications. Where additional experience is required, this can be provided by an appropriately qualified ACUC Divemaster. Where additional instruction is required, it can only be provided by a suitably qualified ACUC instructor.

4 Training prerequisites

To qualify for enrolment in a course according to this Standard, the candidate shall meet the following prerequisites:

- **Minimum age:** Minimum age: 15 years. Students between 12 and 15 years old, who meet open water diver performance requirements may qualify for a special certification. Parental or guardian consent is required when the applicant is a minor. (The definition "minor" will be according to the legislation of each country). Candidates under the age of 16 who pass the course will be awarded a Junior Open Water Diver certification.
- **Health requirements:** Candidates must pass a medical examination suitable for recreational diving, or if the legislation of the country where the course takes place allows it, fill in an appropriate questionnaire. In case of doubt, candidates should be referred to an appropriate doctor.

If the candidate is not examined by a doctor, the candidate shall be required to confirm, by signing it, written information given by the instructor about illnesses or physical conditions that may be a risk related to diving. Candidates will be advised on the importance of appropriate regular medical examinations.

- **Documentation requirements:** Candidates must sign the ACUC Risk Release and the Safe Diving practices forms, both forms are included in the OWD kit or are downloadable from the ACUC private website.
- **Know how to swim.**

5 Instructor: Candidate ratios

- **Theory (classroom or pool):** No limit
- **Confined water:** 8 candidates per Instructor, with an additional 2 candidates per certified Divemaster with an absolute maximum of 12 candidates.
- **Open Water:** 4 candidates per Instructor, with an additional 2 candidates per certified Divemaster with an absolute maximum of 8 candidates.

6 Initial information

The following information shall be made available to the candidates prior to, or during the first class:

- Prerequisites according to 4,
- Limitations of eventual qualification,
- Scope of course,
- Course procedures,
- Costs, insurance and contractual issues according to national regulations,
- Equipment requirements,
- Certification requirements according to point 10,
- Diving related legislation and legal requirements.

7 Course content related to theory knowledge

7.1 Equipment: Candidates will have an intermediate level of theory knowledge about the use and handling of diving equipment.

7.2 Physics of Diving: Candidates will have an intermediate level of theory knowledge on:

- Matter
- Buoyancy
- Light
- Sound
- hand signals
- Air Components
- Pressure
- Gas Laws
 - Boyle
 - Dalton
 - Henry
 - Charles

7.3 Diving Physiology: Candidates will have an intermediate level of theoretical knowledge on:

- Barotrauma
- Basic Anatomy
 - The human body
 - Abdomen
 - Chest

- Ears
- Sinuses
- Decongestants
- Dental Compression
- Mask Compression
- Descent Physiology
 - Nitrogen Narcosis
 - Oxygen poisoning
 - Carbon Dioxide Poisoning
 - Carbon Monoxide Poisoning
- Ascent Physiology
 - Air Embolism
 - Emphysema
 - Pneumothorax
 - Expansion of gases in stomach and intestines
 - Dizziness
 - Decompression sickness
- Related Physiology
 - Lipoid pneumonia
 - Hypothermia
 - Drugs and alcohol

7.4 Diving Environment: Candidates will have a basic level of theoretical knowledge about the local and general conditions of the diving environment and their possible effects on the diver, as well as the diver's impact on the environment, including:

- The Marine Environment
 - Saltwater
 - Sun
 - Currents
 - Waves
 - Shore Topography
 - Navigation
 - Marine life
 - Considerations and Interrelation
- Marine Conservation
 - Wrecks
 - Fish
- Freshwater Environment
 - Fresh water
 - Lakes
 - Rivers
 - Quarries
 - Natural caves
 - Siphons and springs
 - Mines
 - Common freshwater animals
- Ecology
 - Sources of problems
 - Coastal problems
 - Industry
 - Impact of recreational diving
 - Inland water problems
 - Solutions

7.5 First Aid: Candidates will have a basic level of knowledge of First Aid, with an emphasis on accident prevention and including:

- Accident prevention
- General first aid
- Barotrauma
- Decompression sickness

- Other problems related to diving
- Heart attack

7.6 Rescue: Candidates will have a basic level of Rescue knowledge, with an emphasis on accident prevention and including:

- Underwater rescue
- Causes of diving problems
- Problem recognition
- Rescue techniques
- Self help
- Buddy help
- Diver rescue
- Panic
- Fatigue

7.7 Dive Planning: Candidates will have an intermediate level of knowledge of dive planning and preparation, including:

- Physical training
- Pre-Dive planning
- Pre-Dive preparation
- On-site preparation
- Dive plan
- Full decompression tables and procedures
- Air consumption (basic level)
- Descent
- At the bottom
- Ascent
- Altitude Diving (basic level)
- Diving with tides
- Diving and flying
- Dive Log

7.8 Job Opportunities: Candidates will have a basic level of knowledge about job opportunities, including:

- Recreational diving
- Light professional diving
- Heavy professional diving
- Sciences

7.9 ACUC: Candidates will have a basic level of knowledge about ACUC, including:

- What is ACUC
- Specialties available to Open Water Divers
- Information on other ACUC courses

8 Course contents related to diving skills

8.1 Confined Water Diving Skills: Candidates should be able to perform the following skills. Each skill must be mastered in confined water before that skill is performed in open water:

- Equipment use
- Tank Inspection
- Assembly and disassembly of diving equipment (at water's edge)
- Putting on and taking off the equipment
- Water Entry Methods
- Surface dives and exit
- Mouthpiece rinse - snorkel and regulator
- Regulator/snorkel exchanges, surface swimming

- Proper descent and ascent procedures (e.g. equalizing pressure in ears and mask)
- Underwater swimming (different methods)
- Rinsing of mask, including taking it off and putting it on
- Buoyancy control, underwater and on the surface
- Ascents and descents using the vest
- Simulated emergency ascents
- Underwater regulator recovery
- Basic instrument monitoring
- Surface and underwater operation of the quick release of the weight system
- Act as a donor and recipient of an alternative breathing gas source
- Equipment care
- Basic hand signals
- Buddy system
- Basic rescue exercises that include towing and assistance to victims.

8.2 Open Water Diving Skills: Candidates should be able to perform the following skills in conditions typical of the local environment:

- Equipment use
- Tank inspection
- Assembly and disassembly of diving equipment (at water's edge)
- Putting on and taking off equipment
- Water entry methods
- Surface dives and exit methods
- Mouthpiece rinse - snorkel and regulator
- Regulator/snorkel exchanges, surface swimming
- Proper descent and ascent procedures (e.g. equalizing pressure in ears and mask)
- Underwater Swimming (different methods)
- Mask clearing, including taking them off and putting them on (note: special safety precautions will be taken during the process of removing and putting on the mask in open water, specifically in areas with cold water).
- Buoyancy control, underwater and on the surface
- Ascents and descents with the vest
- Underwater regulator recovery
- Basic instrument monitoring
- Act as recipient and donor of an alternative breathing gas source
- Equipment care
- Basic hand signals
- Buddy system

9 Practical training parameters

- All confined water underwater skills will be introduced, directly supervised and evaluated by an ACUC instructor who will be in the water during each session. The diving instructor will be in direct control of the candidates throughout all sessions. Once introduced, the Instructor may use Divemasters or Divemasters in training to demonstrate the skills, but always under the direct supervision of the Instructor. The Instructor must be the one who evaluates the skills.
- Prior to the first open water dive the candidate will demonstrate to a diving instructor the following aquatic skills:
 - 275 meter / 300 yard swim using mask, fins and snorkel, with no time limit and 10 minute survival float, without using any swimming aids. If a diving suit is used, the candidate must be neutrally buoyant on the surface
 - 180 meter / 200 yard swim, without swimming aids, using any type of method, and with no time limit and 10 minute survival float, without using any swimming aids. If a wetsuit is used, the candidate must be neutrally buoyant on the surface.

- Before participating in open water dives, the candidate will have demonstrated in confined water sufficient theory knowledge and diving skills to be able to perform open water dives in the prevailing conditions.
- The maximum depth during training dives will not exceed 18 meters / 60 feet
- All open water training dives will be conducted during daylight hours in water that allows direct vertical access to the surface. Open water dives, therefore, will not be done in caves or under ice.
- During open water dives the candidate will be equipped with at least the diving equipment according to point 2.9.
- All open water underwater skills will be introduced and evaluated by an ACUC Instructor. The dive instructor will be in the water and in charge of each open water dive. During the first 4 open water dives, the Diving Instructor shall be in direct control of the candidates during the dives.
- According to clause 5, the absolute maximum number of candidates per diving instructor, under ideal conditions, for direct supervision and accompaniment under open water is four. The maximum number of candidates per qualified assistant for direct supervision and accompaniment under open water is two.
- At no time should a candidate be left without direct supervision in or under the water.
- Under no circumstances will groups of certified divers (certified diver as buddy of another certified diver and so on) and groups of students from an OWD course be allowed on the same dive, under the direct supervision of the same instructor.
- Under no circumstances is it allowed to buddy up a certified diver with a student (unless said diver has the necessary certification — Divemaster as a minimum).
- Before each dive the diving instructor will prepare an “emergency plan”. In the immediate vicinity of the dive site there will be:
 - A proper first aid kit
 - An emergency oxygen unit with a capacity to deliver at least 15 l/min. For at least 20 min.
 - Adequate communication system to alert emergency services.
 - The diving instructor will cancel or abort the open water dive if environmental conditions or a candidate's physical or mental condition so require.
- A maximum of 3 training dives per day will be allowed

10 Evaluation and certification requirements

- **Knowledge:** The candidate will demonstrate, by means of a written exam (see note below) provided by ACUC, knowledge of diving theory according to point 7 and knowledge of skills according to point 8.
- **Scuba Skills:** The candidate will demonstrate to an ACUC instructor the diving skills as per point 8, considering the training parameters outlined in point 9.

Note: If for any reason, the candidate is unable to take a written exam, then the Instructor may give the candidate an oral exam based on the written exam provided by ACUC and if this is the case, the Instructor will transfer the candidate's oral answers to the written exam. In either case, the written examination must be completed, either directly by the candidate or indirectly by the Instructor, using the candidate's oral responses. Instructors may, if they wish, do additional exams to the candidate, however, the exam provided by ACUC must be taken. Exams must be retained by the instructor for at least 7 years and, if requested by ACUC, sent to ACUC within 48 hours.

11 Checkout dives

To become certified, candidates will complete at least four open water training dives under the direct supervision of an ACUC instructor. The underwater duration of each of these open water dives will be as indicated on the following pages.

Please note with reference to bottom times: the ISO standards for this level indicate that a minimum bottom time per dive of 15 minutes and a cumulative bottom time of 80 minutes is necessary to obtain certification.

ISO standards do not differentiate with respect to water temperature. If you add the ACUC recommended bottom times for cold water, you will see that they add up to a total of 75 minutes. Therefore, if you do these course dives in cold water, take this into consideration and increase bottom time as necessary to meet ISO standards. ACUC recommends that if you have to do this, you do it on the first and/or second dive.

Instructors can perform more skill checks if they wish, however, the four listed dives must be performed and the defined skills must be checked, following the defined difficulty increase process. Also note that while reaching the listed minimum depths at some point during the dive on dives 2, 3 and 4 is mandatory, reaching the listed maximum depths is not mandatory.

12 Candidate's certification

Candidates will be certified as ACUC Open Water Divers when they have complied with all the requirements. These include:

- Pass the ACUC Open Water Diver written examination
- Successfully complete the confined water exercises and requirements
- Successfully complete the course dives

13 Candidate's qualifications

Once the course is completed, the ACUC Open Water Diver will be able to dive in waters of similar characteristics to those in which he was trained, and always accompanied by at least another certified diver. Before venturing in waters of different characteristics, or which require different equipment, expert advice and dive supervision should be obtained. Note: divers should not exceed the depth of 25 meters until they have at least 20 dives experience, or have done the deep diving specialty or the Advanced Diver course. All dives must be no mandatory decompression stops dives.

14 Deviations

None requested.



SKILLS TO BE TESTED IN THE FIRST DIVE

Note: This first dive should be considered as an introduction to the environment, therefore, perform simple exercises so as not to add additional stress to the candidate. The dive must be performed in water between 6 and 12 meters deep. The bottom time suggested is 30 minutes (25 minutes in cold water).

1. Use of equipment and weight adjustment
2. Tank inspection.
3. Equipment assembly and disassembly (out of the water).
4. Putting the equipment on and taking it off (out of the water).
5. Water entry methods (Giant step and walking entry from shore).
6. Surface dives (feet first).
7. Snorkel clearing (Blast method).
8. Regulator / snorkel exchange swimming in surface.
9. Cramp removal
10. Compass surface swim
11. (*) Appropriate descent and ascent procedures (for example, equalize pressure in the ears and mask, rotation during ascent, hand up, OK signal, etc).
12. (*) Buoyancy control at the surface and under water (pivotal method).
13. Equipment care and dive log (including table calculation)

SKILL TEST	BUDDY TEAM 2				BUDDY TEAM 2			
	DIVER 1		DIVER 2		DIVER 3		DIVER 4	
	PASS	FAIL	PASS	FAIL	PASS	FAIL	PASS	FAIL
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								

COMMENTS



SKILLS TO BE TESTED IN THE SECOND DIVE

In this second dive more complex skills will be checked, however, consider that this is only the second dive in open water and therefore we should not add unnecessary stress to the student. Repeat some of the exercises of the first dive, to make a continuous assessment. The depth of this dive should be between 6 and 15 meters. The bottom time suggested is 25 minutes (20 minutes in cold water).

1. Equipment assembly and disassembly (out of the water).
2. Putting the equipment on and taking it off (out of the water).
3. Water entry methods (Back roll and Controlled entry)
4. Surface dives (Head first)
5. (*) Buoyancy control under water (pivotal method).
6. Snorkel clearing (Displacement method)
7. Underwater swim (Bicycle and Scissors methods)
8. (*) Appropriate descent and ascent procedures (for example, equalize pressure in the ears and mask, rotation during ascent, hand up, OK signal, etc).
9. (*) Regulator clearing (Blow method)
10. (*) To act as donor and receiver of an octopus system or similar alternate air source
11. Underwater compass navigation
12. (*) Descending and ascending using the BC
13. Instrument monitoring (often) and basic hand signals
14. Equipment care and dive log (including table calculation)

SKILL TEST	BUDDY TEAM 1				BUDDY TEAM 2			
	DIVER 1		DIVER 2		DIVER 3		DIVER 4	
	PASS	FAIL	PASS	FAIL	PASS	FAIL	PASS	FAIL
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								

COMMENTS



SKILLS TO BE TESTED IN THE THIRD DIVE

In this third dive more complex will be checked. Repeat some of the exercises in previous dives to make a continuous assessment. The depth of this dive should be between 12 and 18 meters. The bottom time is suggested to be 20 minutes (15 minutes in cold water).

1. Equipment assembly and disassembly (out of the water).
2. Putting the equipment on and taking it off (out of the water).
3. (*) Buoyancy control under water (pivotal method).
4. Underwater swim (Frog and Dolphin methods)
5. (*) Appropriate descent and ascent procedures (for example, equalize pressure in the ears and mask, rotation during ascent, hand up, OK signal, etc).
6. (*) Regulator clearing (Purge button methods)
7. (*) Mask clearing underwater, including taking it off and putting it back on. Note: special safety precautions must be observed during this exercise, especially in cold water.
8. (*) Recovering of lost regulator underwater (two methods: back reach and lateral reach)
9. (*) Descending and ascending using the BC and safety stop.
- 10 Tired diver tow at surface
11. Instrument monitoring (often)
12. Equipment care and dive log (including table calculation)

SKILL TEST	BUDDY TEAM 2				BUDDY TEAM 2			
	DIVER 1		DIVER 2		DIVER 3		DIVER 4	
	PASS	FAIL	PASS	FAIL	PASS	FAIL	PASS	FAIL
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								

COMMENTS:



SKILLS TO BE TESTED IN THE FOURTH DIVE

The fourth dive should be a relaxed, end of course, dive, with minimal skill testing. Repeat some of the exercises in previous dives to make a continuous assessment. The depth of this dive it is suggested to be between 12 and 18 meters (only if there are good conditions). Suggested Bottom Time: 15 minutes.

1. (*) Air consumption considerations and planning of this type of dives (18 metres)
2. Buddy system (surface and underwater)
3. Equipment assembly and disassembly (out of the water).
4. Putting the equipment on and taking it off (out of the water).
5. (*) Appropriate descent and ascent procedures (for example, equalize pressure in the ears and mask, rotation during ascent, hand up, OK signal, etc) and safety stop.
6. (*) Buoyancy control under water (pivotal method).
7. (*) Regulator clearing (Purge button method)
8. Instrument monitoring more often than usual (own and buddy's).
9. (*) Controlled emergency swimming ascent
10. Equipment care and dive log (including table calculation)

SKILL TEST	BUDDY TEAM 2				BUDDY TEAM 2			
	DIVER 1		DIVER 2		DIVER 3		DIVER 4	
	PASS	FAIL	PASS	FAIL	PASS	FAIL	PASS	FAIL
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								

COMMENTS: