



## Special considerations points

- *There are no ISO standards for this course*
- *Third mandatory course in the ACUC diver training system*
- *It is superior and additional in academic and skills content to the ISO 24801-2 (Autonomous Diver).*

## Introduction

The ACUC Rescue Diver course is the third compulsory level within the ACUC training ladder. This course can be taught, evaluated and certified by any ACUC Open Water Instructor or higher level. The main features of this course are that candidates who successfully complete the course will be able to recognize and react to diving emergencies. **It also covers First Aid related to diving.** To improve the safety of diving in general, this course is the minimum level that ACUC recommends that all its divers obtain.

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 main 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, 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 Rescue 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

In addition to the competencies of an ACUC Advanced Diver, an ACUC Rescue Diver will be trained to have sufficient competencies through knowledge, skills and experience to dive and act as a safety diver, with other certified divers of any level in open water. ACUC Rescue Divers must dive within the following parameters:

- Dive to a maximum depth of 40 meters / 130 feet
- 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.

If accompanied by an ACUC instructor, a certified ACUC Rescue Diver can gain progressive experience beyond these parameters (except depth) 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:** 16 years. Age of majority in accordance with current legislation in the place where the course is held. There are no “Junior” certifications for this level available for minors.
- **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.
- **Previous Certification:** To sign up for the course, ACUC Advanced Diver or similar with at least 12 hours of bottom time experience (see also certification requirements). The Instructor must ensure that candidates coming from other organisations recognised by ACUC, have all the knowledge and skills required by an ACUC Advanced Diver before they are allowed to proceed to the ACUC Rescue Diver course, including full knowledge of the ACUC Deco Tables
- **Documentation requirements:** Candidates must sign the ACUC Risk Release and the Safe Diving practices forms, both forms are downloadable from the ACUC private website.

## 5. Instructor: Candidates training ratios

- **Theory (classroom or pool):** No limit
- **Confined water:** 10 candidates per instructor, with an additional 4 candidates per certified Divemaster, with an absolute maximum of 20 candidates.
- **Open Water:** 6 candidates per Instructor, with an additional 2 candidates per certified Divemaster with an absolute maximum of 12 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 with theory knowledge

Candidates must already have the knowledge of an Advanced Diver, and also:

**7.1 Rescuer Preparation:** Candidates will have an intermediate knowledge of:

- Physical conditioning
- Pre-dive organization
- Underwater Communications
- Ship to Diver Communications

**7.2 Aggressions Produced by Marine Life:** Candidates will have intermediate knowledge of:

- Contact Wounds
- Sting Wounds
- Bite Wounds
- Shock

**7.3 Lung Overexpansion and Decompression Accident:** Candidates will have intermediate knowledge of:

- Lung overexpansion
- Decompression accident
- How to differentiate the symptoms

**7.4 Drowning and Resuscitation Techniques:** Candidates will have an intermediate knowledge of

- The Blue Drowned
- The White Drowned
- Cardio Pulmonary Resuscitation
- Complications of Cardio Pulmonary Resuscitation
- Pulmonary resuscitation methods
- Airway clearance
- Resuscitation of the Heart: The External Massage of the Heart

**7.5 Stress and Panic:** Candidates will have an intermediate understanding of:  
Incident or Accident

- Stress

- Types of Stress
- Stress Physiology
- Recognition of Stress Symptoms
- How to act
- Panic
  - Panic Signs
  - Self-rescue
  - Rescue of Others
  - What can be done to reduce panic episodes

#### **7.6 Dizziness and Vertigo**

#### **7.7 Equipment problems**

**7.8 Theory of rescue actions:** candidates will have intermediate knowledge of:

- “Dry” rescue
- Rescuer’s risks
- Swimming rescue
- Approaches to the victim
- Holds and Escapes
- Water towing techniques
- Surface tows and Artificial Respiration
- Placement of Unconscious Victim
- Deep Rescue: Ascent Techniques
- Use of the victim’s vest
  - Advantages
  - Disadvantages
- Use of rescuer’s vest
  - Advantages
  - Disadvantages
- Pulling a Victim out of the water

**7.9 Basic Search Techniques:** Candidates will have a basic understanding of:

- Lost in the sea
- Lost under ice
- Lost in a wreck
- Lost in a cave
- Diver trapped in nets or underwater vegetation

#### **7.10 Currents, Waves and Tides**

#### **7.11 Dive emergency management**

- Scene management (including rescue team management)
- Neurological exam procedures
- Evacuation and professional treatment
  - Emergency Medical Services
  - Hyperbaric chamber
- Students must prepare an emergency assistance plan, including steps of emergency management
- Elements of a written report of an incident
  - ACUC accident/incident report form
- Equipment retention following an incident

## **8. Course contents related to Diving skills**

**8.1 Confined Water Diving Skills:** Besides the ones already acquired as Advanced divers, 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. Skills should be practiced often.

- “Dry” Rescue
- Swimming rescue
- Approaches to the victim

- Holds and Escapes
  - Neck hold
  - Waist hold
  - Wrist hold
  - Back hold
- Water towing techniques
  - Without equipment
    - Facilitated
    - Shoulders
    - Shoulder and Chin
    - Head
    - Arm
  - With Basic Equipment
    - Injured unconscious, conscious and restless, or sea with waves
    - Injured conscious and calm
    - Conscious and restless injured
  - With Scuba Equipment
    - Injured unconscious, conscious and restless, or sea with waves
    - Injured conscious and calm
    - Conscious and restless injured
- Surface tows and Artificial Respiration
- Placement of Unconscious Victim
- Deep Rescue: Ascent Techniques
  - Lack of air
    - Conscious and calm victim
    - Victim conscious and restless or disoriented
  - With air
    - Conscious victim who cannot ascend
    - Unconscious victim
  - Use of rescuer's vest
  - Intervention methods
    - Lack of air
    - With Air
  - Lifts
    - Front
    - Side
    - Back with rope
    - Back with horse mount
- Pulling a Victim out of the water
  - Rescuer with access to other people
  - Rescuer alone with conscious victim
  - Rescuer alone with unconscious victim
- Search in circles
- Search dragged by a rope

**8.2 Open Water Diving Skills:** In addition to those already acquired as an Advanced Diver, Candidates should be able to perform the following skills in conditions typical of the local environment.

- “Dry” Rescue
- Swimming rescue
- Approaches to the victim
- Water towing techniques
  - With Basic Equipment
    - Facilitated
    - Shoulders
    - Shoulder and Chin
    - Head
    - Arm
    - Victim unconscious, conscious and restless, or sea with waves
    - Victim conscious and calm

- Conscious and restless victims
  - With Scuba Equipment
    - Victim unconscious, conscious and restless, or sea with waves
    - Victim conscious and calm
    - Victim and restless casualties
- Placement of Unconscious Victim
- Deep Rescue: Ascent Techniques
  - Lack of air
    - Conscious and calm victim
    - Victim conscious and restless or disoriented
  - With air
    - Conscious victim who cannot ascend
    - Unconscious victim
  - Use of rescuer's vest
  - Intervention methods
    - Lack of air
    - With Air
  - Lifts
    - Front
    - Side
    - Back with rope
    - Back with horse mount
- Pulling a victim out of the water
  - Rescuer with access to other people
  - Rescuer alone with conscious victim
  - Rescuer alone with unconscious victim
- Search in Circles
- Search dragged by a rope
- Scene management (including rescue team management)
- Neurological exam procedures
- Evacuation and professional treatment
  - Emergency Medical Services
  - Hyperbaric chamber
- Equipment retention following an incident

## 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.
- Prior to the first open water dive the candidate will show effective proof of, or demonstrate to a diving instructor the following aquatic skills, without the use of a mask, fins, snorkel, or other swimming aids:
  - 100m / 330f swimming distance,
  - 10 minute survival float.
- 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 25 meters / 80 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. (see the Definitions section)
- All open water underwater skills will be introduced, directly supervised and evaluated by an ACUC Instructor. The dive instructor will be in the water and in charge of each open water dive.

- 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 six. 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.
- 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 which delivers at least 15 l/min., for at least 20 minutes
  - 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 are 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 satisfactorily demonstrate to an ACUC instructor the diving skills as per point 8.
- **Minimum Dives:** The candidate must have at least 15 hours of **bottom** time before obtaining certification.

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. It is mandatory that candidates have, or obtain during the course, the O2ER (Oxygen Emergency Responder) ACUC certification or similar from other ACUC recognised organization.

## 11 Checkout training dives

To become certified, candidates will complete at least two open water training dives under the direct supervision of an ACUC instructor. The underwater duration of each of these open water dives will be at least 30 minutes, except in cases of cold water, where 20 minutes will suffice.

## 12 Candidate's certification

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

- Minimum 30 Open Water Dives
- Pass the ACUC Rescue Diver written examination
- Successfully complete the Check-out dives for the ACUC Rescue Diver course
- Current CPR and O2 Administration.

## 13 Candidate's qualifications

Once completed the course, the ACUC Rescue Diver will be able to dive in waters of similar characteristics as those in which he was trained up to a maximum depth of 40 meters / 130 feet and always accompanied by at least another certified diver.



## 14 Deviations

Deviations are only valid in the country or area mentioned.

Country or Area	Deviation related with	Reason	Deviation approval
Catalonia (Spain)	Minimum number of dives needed to obtain the official certificate of "Buceador 1ª"	DOGC 3326; Page 1915 of 13/02/2001, where it says that the minimum number of dives for the official equivalent certificate to the ACUC Rescue Diver, are 40	In Catalonia (Spain) to obtain the ACUC Rescue Diver certification, candidates must have 20 hours bottom time instead of 15 hours