



ACUC SCUBA DIVER - Curriculum and Standards Ref: acuc-st-scd July 2005

Foreword

The ACUC Scuba Diver course is an **optional** course. Its place, regarding skills and theory level, within the ACUC training ladder, is above and introduction to dive course and below the ACUC Open Water Diver course. This course can be taught by any ACUC Assistant Instructor or higher level but must be evaluated and certified by any ACUC Entry level Instructor or higher. The main characteristics of this course is that the students that successfully completes the course, will not be able to dive if it is not under the direct supervision of at least, someone with the certification of ACUC Divemaster, or similar certification from other organisations members of the RSTC or CMAS, and will only be able to dive to an absolute maximum depth of 15 meters / 50 feet.

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 exist, must request in writing to the ACUC main office (Canada or Spain) 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 (Point 12)

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 students, diving environment, etc), therefore the training hours needed are dependant on the fulfillment 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 Scuba Diver level. This Standard applies only to contractual training and certification in recreational scuba diving.

2. Definitions

For the purposes of this standard and any other standard referenced as acuc-st-xxx, the following definitions apply. Please note that not all terms shown next might appear in this 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 this Standard, as issued by ACUC.
- 2.5 cold water:** Water less than 10°C from its highest average temperature or water of 10°C 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, sanctioned by ACUC to teach, evaluate and certify divers.
- 2.18 theoretical knowledge:** knowledge imparted in a dry environment (classroom, pool deck, etc)
- 2.19 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.
- 2.20 water skills:** knowledge imparted inside a wet environment (pool water, sea water, etc)

3 Competencies of a certified, recreational ACUC Scuba Diver

An ACUC scuba diver shall be trained to have sufficient competencies by knowledge, skill and experience to dive in open water with other scuba divers of at least the same level always under the direct supervision of at least an ACUC Divemaster or similar from other RSTC or CMAS member organisations.

ACUC Scuba Divers shall dive within the following parameters, accompanied by a scuba diver of at least ACUC Divemaster level or similar

- ▶ dive to a maximum depth of 15 meters / 50 feet under the direct supervision of an ACUC Divemaster or similar
- ▶ make dives which do not require in-water mandatory decompression stops,
- ▶ dive only when appropriate support is available at the surface,
- ▶ dive under conditions that are equal or better than the conditions where they were trained.

If accompanied by an ACUC instructor, certified ACUC scuba divers may gain progressive experience beyond these parameters and develop competency in managing more challenging diving conditions designed to lead to higher qualifications.

Where further instruction is required this can only be provided by a suitably qualified ACUC instructor. Where only further experience is required, this may be supervised by an ACUC Divemaster or similar.

4 Prerequisites for training

In order to qualify for enrolment in a course according to this Standard the student shall meet the following prerequisites:

- 4.1 **Minimum age:** 12 years. Parental or legal guardian consent is required when the applicant is a minor. ("minor" definition will be according to each country's legislation).
- 4.2 **Health requirements:** Students shall be medically screened as suitable for recreational diving by means of an appropriate medical examination, or if the country's legislation where the course is taken allows it, an appropriate questionnaire. In any case of doubt, students shall be referred to proper medical resources. If the student is not examined by a physician, the student should be obliged to confirm by signature a written information given by the instructor on diseases or physical conditions which may be a diving related risk. Students shall be advised of the importance of appropriate regular medical examinations.
- 4.3 **To know how to swim.**

5 Training Ratios

- ▶ **Theory (classroom or pool):** No limit
- ▶ **Confined Water:** 8 students per Instructor, with an additional 4 students per Assistant Instructor or Divemaster, with an absolute maximum of 16 students.
- ▶ **Open Water:** 4 students per Instructor, with an additional 2 students per Assistant Instructor or Divemaster, with an absolute maximum of 8 students.

6 Introductory information

The following information shall be made available to the students prior to, or during the first class meeting.

- ▶ 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 10,
- ▶ diving related legislation and legal requirements.

7 Course content relating to theoretical knowledge

- 7.1 Equipment:** Students shall have a basic practical level of knowledge concerning the use and handling of diving equipment items.
- 7.2 Physics of diving:** Students shall have a basic level of knowledge regarding the influence and effects of changing pressure, in particular regarding:
- ▶ equalization (e.g. ears and mask)
 - ▶ breathing (not holding breath and effect of pressure on air consumption),
 - ▶ buoyancy and how to control it.
 - ▶ Time and depth (Decompression safety curve)
- 7.3 Medical problems related to diving:** Students shall have a basic knowledge of avoiding problems resulting from:
- 7.3.1 Direct effects of pressure
- 7.3.1.1 Increasing pressure (descent phase)
- ▶ gas compression (e.g. ears, sinuses, masks, lungs, suits, teeth)
- 7.3.1.2 Decreasing pressure (ascent phase)
- ▶ gas expansion (e.g. ears, sinuses, lungs, stomach, intestines, teeth)
 - ▶ decompression illness (DCI) (e.g. decompression sickness, arterial gas embolism)
- 7.3.2 Other hazards
- ▶ physical and mental stress
 - ▶ effects of temperature on the diver
 - ▶ medication, drugs, alcohol
- 7.4 Dive environment:** Students shall have a basic knowledge concerning the local and general conditions of the diving environment and their possible effects on the diver and the diver's impact on the environment.

8 Course content relating to scuba skills

- 8.1 Confined water scuba skills:** Students shall be able to perform the following skills. Each skill shall be mastered in confined water before that skill is performed in open water.
- ▶ use of basic equipment
 - ▶ diving equipment assembly and disassembly (at water's edge)
 - ▶ entry and exit
 - ▶ mouthpiece clearing - snorkel and regulator
 - ▶ regulator/snorkel exchanges, swimming at the surface
 - ▶ proper descent and ascent procedures (e.g. equalizing pressure in ears and mask)
 - ▶ swim under-water
 - ▶ mask-clearing, including removal and replacement
 - ▶ under-water and surface buoyancy control
 - ▶ under-water regulator recovery
 - ▶ basic instrument monitoring
 - ▶ surface operation of the quick release of the weight ballast system
 - ▶ act as receiver of an alternative breathing gas source
 - ▶ equipment care
 - ▶ basic hand signals
- 8.2 Open water scuba skills:** Students shall be able to perform the following skills in conditions typical of the local environment.
- ▶ use of basic equipment
 - ▶ diving equipment assembly and disassembly (at water's edge)
 - ▶ entry and exit
 - ▶ mouthpiece clearing - snorkel and regulator
 - ▶ regulator/snorkel exchanges, swimming at the surface
 - ▶ proper descent and ascent procedures (e.g. equalising pressure in ears and mask)
 - ▶ swim under-water
 - ▶ mask-clearing, including removal and replacement (*)
 - ▶ under-water and surface buoyancy control
 - ▶ under-water regulator recovery
 - ▶ basic instrument monitoring

- ▶ surface operation of the quick release of the weight ballast system
- ▶ act as receiver of an alternative breathing gas source
- ▶ equipment care
- ▶ basic hand signals

(*) Special safety precautions are to be taken during the removal and replacement of mask in open water, specifically in those areas with cold water.

9 Practical training parameters

- 9.1** All under-water skills in confined water shall be introduced, directly supervised and evaluated by an ACUC instructor, who shall be in the water during each session. The scuba instructor shall be in direct control of students throughout all sessions.
- 9.2** Prior to the first open water dive the student shall effectively show proof of, or demonstrate, to a scuba instructor the following watermanship skills, without the use of mask, fins, snorkel, or other swimming aids:
- ▶ 50 m distance swimming,
 - ▶ 5 minutes survival swim/float.
- 9.3** Before participating in open water dives a student shall have demonstrated sufficient theoretical knowledge and scuba skills in confined water to be able to perform the open water dives in the prevailing conditions.
- 9.4** The maximum depth during training dives shall not exceed 15 meters / 50 feet
- 9.5** All training open water dives shall be conducted during daylight hours in water that allows direct vertical access to the surface. Open water dives therefore shall not be conducted in under-water caves or below ice.
- 9.6** During open water dives the student shall at least be equipped with diving equipment according to 2.9.
- 9.7** All under-water skills in open water shall be introduced, directly supervised and evaluated by an ACUC instructor. The scuba instructor shall be in the water and in charge of each open water dive. During the first 2 open water dives the scuba instructor shall be in direct control of students throughout the dives. During subsequent open water dives students may be supervised by a qualified assistant except when skills are being performed or evaluated.
- 9.8** As per clause 5, the absolute maximum number of students per scuba instructor in ideal conditions for supervision and escorting under water is four. The maximum number of students per qualified assistant for supervision and escorting under water is two. At no time shall a student in or under water be left without supervision.
- 9.9** Prior to open water dives the scuba instructor shall prepare an “emergency plan”. In the immediate vicinity of the dive site there shall be:
- ▶ a suitable first aid kit
 - ▶ an emergency oxygen unit with a capacity of delivering at least 15 l/min. for at least 20 min.
 - ▶ communication system suitable for alerting emergency services.
- 9.10** The scuba instructor shall cancel or abort the open water dive if environmental conditions or a student’s physical or mental condition make this necessary.
- 9.11** A maximum of 3 daily training dives will be allowed

10 Assessment and certification requirements

- 10.1 Knowledge:** The student shall demonstrate, by means of the written test (**) supplied by ACUC, knowledge of scuba diving theory according to 7 and knowledge of skills according to 8.
- 10.2 Scuba Skills:** The student shall satisfactorily demonstrate to an ACUC instructor, the scuba skills according to 8.

(**) If for some reason, the student can not do a written test, then the Instructor can do an oral examination to the student based on the written test provided by ACUC and if this is the case, the Instructor will transfer the student’s oral answers to the written test. Whatever the case, the written test must be completed, either directly by the student or indirectly by the Instructor, using the student’s oral answers.

Instructor can, if they wish, offer additional tests to the student, however, the ACUC provided test must be done.

11 Training Dives

To be certified students shall complete at least **two** qualifying training open water dives under the direct supervision of an ACUC instructor. The underwater duration of each of these two qualifying open water dives shall be at least 20 min.

12 Deviations

None requested