



CMAS

CONFÉDÉRATION MONDIALE
DES ACTIVITÉS SUBAQUATIQUES

WORLD UNDERWATER FEDERATION

SCIENTIFIC COMMITTEE

**Non-professional CMAS
Scientific Specialty Courses
(SSC)**

ADMINISTRATIVE TEXT

2015

The non-professional CMAS Scientific Specialty Courses (SSC) combines the expertise of marine and freshwater scientists, underwater geologists and archaeologists, diving officers, administrators, legislators, individual divers, from different parts of the world scientific diving community. Therefore we revised the SSC Version 2000/01 with the colleagues in the Scientific Committee (SC) mentioned below, who helped to produce this new standards, and acknowledges the help and advice given by many other people through letters or oral comments.

CMAS Scientific Committee 2015

President of the Scientific Committee	PD Dr. Ralph O. Schill (GER)
Secretary	Dr. Gerd Maack (GER)
Director for Biology and Conservation	Dr. Stavros Kaniklidis (CYP)
Member for Biology and Conservation	Prof. Dr. Akin Yesilkaya (TUR)
Member for Biology and Conservation	Prof. Dr. Marcus Frohme (GER)
Member for Biology and Conservation	Marwa Saleh (EGY)
Member for Biology and Conservation	Mouloud Benabdi (ALG)
Member for Biology and Conservation	Ma. Coty Zeckua Ramos (MEX)
Director for Underwater Cultural Heritage	Ing. Gerd Knepel (GER)
Member for Underwater Cultural Heritage	Mag. Henrik Pohl (AUT)
Member for Underwater Cultural Heritage	Assoc. Prof. Ufuk Kocabas (TUR)
Member for Underwater Cultural Heritage	Dr. Mustafa Tolay (TUR)
Member for Underwater Cultural Heritage	Gilbert Fournier (PHI)
Member for Underwater Cultural Heritage	Dr. Emad Khalil (EGY)
Director for Relations between Amateurs and Prof. (working group Scientific Diving)	Dr. Sergey Fazlullin (RUS)
Director for Information - Communication - Doc. (working group Conservation Biology)	Prof. Dr. Alen Soldo (CRO)

Non-professional CMAS Scientific Specialty Courses (SSC)

Objective

To provide non-professional divers the knowledge and the tools necessary for a better knowledge and a better enjoyment of marine biology, freshwater biology, geo sciences and cultural heritage, bearing in mind the conservation of that natural and cultural environment in which we are the privileged guests.

During all activities we have to respect the laws and regulations of the CMAS and the respective country.

The non-professional CMAS Scientific Specialty Courses (SSC) enable the divers to become familiar, with the underwater environment and with its heritage, showing us its particularities and its relationships, for a better respect and knowledge of it.

The SSCs form non-professional divers of excellent quality and therefore are of great help to collaborate in citizen science projects with scientists to expand opportunities for scientific data collection and to provide access to scientific information for community members. However, all these participants are non-professional divers, who are diving under classical sport diver conditions, considering the individual abilities and experiences of the divers.

Quality Assurance

The CMAS Scientific Committee calls the Scientific Committee of the national CMAS federation to use and apply an assurance quality system for the courses within the federation. In line with the ongoing development in underwater sciences, regular further qualification courses are an integral part of such a programme.

Availability of non-professional CMAS Scientific Specialty Course (SSC)

Non-professional CMAS Scientific Specialty Courses (SSC) in the respective areas with code:
 Level 1: non-professional divers and non-divers with initial interest in a particular field (introductory course), Level 2: non-professional divers with interest in a particular scientific field (course), Level 3: non-professional divers, mostly with higher qualification and with substantial interest in a particular scientific field (advanced course). **in preparation*

	Marine biology	Freshwater biology	Geology	Cultural heritage
Level 1	<i>Ocean Discovery Course</i>	<i>*Lake & River Discovery Course</i>	<i>*Underwater Geo Discovery Course</i>	<i>Underwater Cultural Heritage Discovery Course</i>
Level 2	<i>Marine Biology Course</i>	<i>Freshwater Biology Course</i>	<i>Underwater Geology Course</i>	<i>Underwater Archaeology Course</i>
Level 3	<i>Advanced Marine Biology Course</i>	<i>Advanced Freshwater Biology Course</i>	<i>Advanced Underwater Geology Course</i>	<i>Advanced Underwater Archaeology Course</i>

Minimum numbers of teaching units (usually 45 min.) and numbers of dives for the different levels of the non-professional CMAS Scientific Specialty Courses (SSC).

	Duration in days	Theoretical teaching units (TTU)	Practical teaching units (PTU)	Number of dives
Level 1	1	4	2	0-2
Level 2	2	6	6	2-4
Level 3	5	15	15	4-8

Non-professional CMAS Scientific Specialty Course (SSC) Instructor and Instructor Trainer requirements

An Instructor Trainer will be nominated by the Scientific Committee of the national CMAS federation and confirmed by the CMAS Scientific Committee. Applicants have to provide evidence of at least several years of professional experience for the respective scientific field. Exemptions may be made where it is evident that the applicants have a great knowledge in the respective scientific field without professional experience. A high sensibility for sustainable diving is expected. For the confirmation an application should be submitted to the CMAS Scientific Committee in one of the CMAS languages. This includes a copy of the diving licences and a *Curriculum Vita*. The licence is valid for a period of five years from the date of issue and can be renewed.

An instructor for SSC level 1 will be nominated and confirmed by an Instructor Trainer after she/he successfully participated in a SSC for multiplier given by the national CMAS federation. The minimum diving qualification is CMAS Diver ** with at least 100 dives. If the speciality course instructor is not at least a CMAS Diving Instructor *, a CMAS Diving Instructor * must be present to monitor the safety of the divers in the water during the SSC. She/he must previously participate in a SSC of minimum level 1 in the respective area. A professional experience is not necessary. A high sensibility for sustainable diving is expected. The licence is valid for a period of five years from the date of issue and can be renewed.

Overview of the requirements:

Non-professional SSC Instructor, course level 1:

- CMAS Diver ** and 100 dives
- successful participation of a minimum level 1 SCC in the respective area
- successful participation in a SSC for multiplier with an exam
- great interest in the respective field and teaching abilities
- a high sensibility for sustainable diving

An instructor for non-professional SSC level 2 and level 3 will be nominated by an Instructor Trainer and confirmed by the Scientific Committee of the national CMAS federation. The min. diving qualification is CMAS Diver ** with at least 100 dives. If the speciality course instructor is not at least a CMAS Diving Instructor *, a CMAS Diving Instructor * must be present to monitor the safety of the divers in the water during the SSC. He/she should previously participate in a SSC of the level 2 and level 3 and subsequently organize a SSC, supervised by an Instructor Trainer. The applicants have to provide evidence of at least several years' professional experience for the respective area for which they want an Instructor certificate/card. Exemptions may be made where it is evident that the applicants have a great knowledge in the scientific field.

A high sensibility for sustainable diving is expected. A level 2 and level 3 Instructor can also teach level 1. The licence is valid for a period of five years from the date of issue and can be renewed.

Overview of the requirements:

Non-professional SSC Instructor, course level 2 & level 3:

- CMAS** diving licence and 100 dives
- academic background in the respective field, or
- several years of professional experience in the respective field
- teaching abilities
- a high sensibility for sustainable diving

Non-professional CMAS Scientific Specialty Course (SSC) code system

non-professional SSC	Level	Instructor Trainer Code	Instructor Code	Participant Code
----------------------	-------	-------------------------	-----------------	------------------

Marine biology

Ocean Discovery Course	1	ODCIT	ODCI	ODC
Marine Biology Course	2	MBCIT	MBCI	MBC
Advanced Marine Biology Course	3	MBCIT	MBCI	AMBC

Freshwater biology

*Lake & River Discovery Course	1	LRDCIT	LRDCI	LRDC
Freshwater Biology Course	2	FBCIT	FBCI	FBC
Advanced Freshwater Biology Course	3	FBCIT	FBCI	AFBC

Geology

*Underwater Geo Discovery Course	1	UGDCIT	UGDCI	UGDC
Underwater Geology Course	2	UGCIT	UGCI	UGC
Advanced Underwater Geology Course	3	UGCIT	UGCI	UAGC

Cultural heritage

Underwater Cultural Heritage Discovery Course	1	UCHDCIT	UCHDCI	UCHDC
Underwater Archaeology Course	2	UACIT	UACI	UAC
Advanced Underwater Archaeology Course	3	UACIT	UACI	AUAC

How to order the non-professional CMAS Scientific Specialty Courses certificates/cards

The non-professional SSC certificates/cards for SSC participants have to be ordered by an authorized SSC Instructor or SSC Instructor Trainer via electronic order system of the national CMAS federation in the CMAS headquarters in Rome, Italy.

The non-professional SSC Instructor certificates/cards have to be ordered by an authorized SSC Instructor Trainer via electronic order system of the national CMAS federation in the CMAS headquarters in Rome, Italy.

The non-professional SSC Instructor Trainer certificates/cards have to be ordered by the President or his/her deputy of the national CMAS federation via electronic order system in the CMAS headquarters in Rome, Italy.

The cost of all SSC certificates/cards can be viewed in the current price list in the electronic order system of the CMAS.

How to renew a licence

A licence is valid for a period of five years from the date of issue. If the SSC Instructor or Instructor Trainer held courses within that period she/he can renew a licence via electronic order system of the national CMAS federation in the CMAS headquarters in Rome, Italy. If no SSC or appropriate activities like further trainings are verifiable, the Scientific Committee of the national CMAS federation, respectively the CMAS Scientific Committee must decide again about the allocation of the licence/card.

All questions should be addressed to the
President of the CMAS Scientific Committee
CMAS H.Q. Viale Tiziano, 74 00196 Rome, Italy
Tel. +39-06-32 11 05 93
Fax +39-06-32 11 05 95
Email: sci@cmas.org
www.cmas.org