Section 5B: AUSI Scuba Teaching Guidelines

LEVEL IV SCUBA DIVER – October 2005

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COURSE PLANNING

The AUSI Level IV Scuba Diver (Deep Specialty) course is designed to train divers to dive to 39 metres (130ft) in open water that has direct vertical access to the surface during daylight hours with out the direct supervision of an AUSI Scuba Instructor.
The course has three components:
1. Theory - four presentations, lesson reviews, and test,
2. Practical Skills - one session, and
3. Ocean Dives - four ocean dives.

Instructor

The course can only be conducted by an AUSI Level IV Scuba Instructor or higher.

Ratios

Instructors must never exceed the maximum instructor to student ratios as described below:
1. Theory 12:1,
2. Pool 8:1 or 16:1 with the assistance of a lower level AUSI Scuba Instructor, and
3. Ocean 6:1 or 8:1 with the assistance of a lower level AUSI Scuba Instructor.

Note: Ratios are for ideal conditions and may need to be reduced due to water conditions or student requirements.

Prerequisites

Prerequisites for the AUSI Level IV Scuba Diver course are:
1. Be at least 16 years of age,
2. Be medically fit to scuba dive, use the *AUSI Medical History Form* or approved equivalent,
3. Be a certified AUSI Level III Scuba Diver or approved equivalent, and
4. Have completed at least 16 ocean dives of which four shall be to a depth of at least 24 metres (80ft).

Before conducting the course ensure that the students meet all the prerequisites and sign the *AUSI Level IV Scuba Diver Participation Agreement.*

Materials

During the course it is compulsory for the instructor to use the following:
1. **AUSI Advanced Scuba Diving Manual** or relevant AUSI Course Notes,
2. *AUSI Medical History Form* or approved equivalent,
3. *AUSI Level IV Scuba Diver Participation Agreement,*
4. *AUSI Level IV Scuba Diver Training Record,*
5. *AUSI Level IV Scuba Diver Theory Test,* and
6. **AUSI Certification Sheet.**

Items 1 & 6: Can be purchased from AUSI Head Office.

In lieu of Item 1: AUSI Level IV Scuba Course Notes and lesson review (AUSI Scuba Learning Modules 8) can be downloaded from www.ausi.com.au.

Items 2, 3, 4 & 5: Can be photocopied from the Course Materials section of the AUSI Instructor Manual or registered instructors can download an AUSI Level IV Scuba Instructor Pack from www.ausi.com.au.

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Equipment

Each instructor and student shall use the equipment required by Australian Standard AS 4005.1-2000 during all practical training and ocean diving throughout the course. This is listed below:

1. Mask, snorkel and fins,
2. Approved air cylinder and valve (Australian Standard AS 2030.1),
3. Buoyancy control device with scuba feed inflator designed to maintain the head above water surface when inflated (separate back pack, if appropriate),
4. Regulator with a balanced first stage
5. Alternate air source, and a redundant air supply,
6. Depth and cylinder pressure gauges and timing device, and
7. Adequate exposure protection with appropriate quick release weight system.

Instructors must have all of the above plus a knife and compass, and a redundant air supply on all dives.

Timetable

Below is a suggested course timetable:

First Evening	19:00	Introduction
	19:30	Practical Training Session
Day 1	8:00	**Theory - Deep Diving**
	11:00	Ocean Dive 1 - Orientation Dive: 30 – 36m (100 – 120ft)
	13:00	Lunch
	15:00	Ocean Dive 2 - Skills Dive: 30 – 33 m (100 – 110ft)
Day 2	8:00	Ocean Dive 3 - Consolidation Dive: 36 – 39 m (120 – 130ft)
	12:00	Lunch
	13:00	Theory Test and Review
	15:00	Ocean Dive 4 - Certification Dive: 30 – 33m (100 – 110ft)
	17:00	Debrief

NOTES:

1. Try to maximise surface interval between Dives 2 & 3 and Dives 3 & 4.
2. Keep the night dive and the navigation dive to a minimum depth and avoid multiple ascents.
3. This course can be conducted in conjunction with an AUSI Level III Scuba Diver course but instructors must ensure that the prerequisites for each course are met, ie Level III deep dives must be conducted before Level IV dives.

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CLASSROOM PRESENTATIONS

Introduction

The following materials are required for the Introductory Session:

1. **AUSI Advanced Scuba Diving Manual** or relevant AUSI Course Notes,
2. *AUSI Medical History Form or approved equivalent,*
3. *AUSI Level IV Scuba Diver Participation Agreement,* and
4. *AUSI Level IV Scuba Diver Training Record.*

During the introductory session, which must be done before any practical sessions are conducted, the instructor is required to do the following:

1. Have student complete the *AUSI Medical History Form* or approved equivalent,
2. Have student complete and sign the relevant sections of the *AUSI Level IV Scuba Diver Participation Agreement,*
3. Sight evidence that the student meets all the prerequisites for the course,
4. Have students fill-in and sign the prerequisites section of the *AUSI Level IV Scuba Diver Training Record,*
5. Counter sign the prerequisites section of the *AUSI Level IV Scuba Diver Training Record,*
6. Explain the AUSI Pathway and where the current course fits in,
7. Explain the structure of the AUSI Level IV Scuba Diver Course,
8. Discuss the timetable for the course, and
9. Explain the requirements for certification.

The recommended text books for those students who wishing to do further reading are:

1. **Recreational Scuba Diving** – Sinclair & Kenley,
2. **The Essentials of Deeper Sport Diving** - J. Lippmann,
3. **Deeper into Diving** - J.Lippmann, and
4. **DAN Emergency Handbook** - J.Lippmann & S.Bugg.

These texts are available from AUSI Head Office.

Theory Modules

The AUSI Level IV Scuba Diver course consists of one theory presentation and lesson review, which should be conducted in accordance with the Classroom Presentation section of the **AUSI Instructor Course Notes**, and a theory test.

The topic covered is:

Deep Diving (AUSI Scuba Learning Module 8).

The **AUSI Advanced Scuba Diving Manual** or relevant AUSI Course Notes must be made available to the students during the theory sessions. After the theory sessions have been attended the students must complete the lesson review for each session. These notes are also available in A4 for the production of overhead transparencies, contact AUSI Head Office.

The *AUSI Level IV Diver Training Record* is to be updated at the end of every theory session.

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PRACTICAL SKILLS TRAINING

All practical skills training must be conducted in accordance with the Practical Skills Training section of the **AUSI Instructor Course Notes**.

The Practical Skills Session

The AUSI Level IV Scuba Diver course requires one practical skills session, which shall be conducted in a pool or confined water. The session is described in detail below. The skills are numbered using the following system:

<LEVEL>**.**P**.**<SESSION #>**.**<SKILL #>

where:

<LEVEL> is the AUSI Scuba Diver Course Level;
P represents that it is a practical skill;
<SESSION #> is the practical skills session number; and
<SKILL #> is a sequential number starting with the first skill of the session

eg IV.P.1.4 is skill four of the first practical skills session in the AUSI Level IV Scuba Diver course.

The aims of the session are to:

1. Review the skill level of the student to ensure adequate competency for participation in the course,
2. Introduce the student to correct reel and line techniques
3. Introduce the student to blacked-out mask techniques ie simulation of silt out, and
4. Introduce the student to the use of redundant air systems.

The session consists of:

1. Review of regulator skills,
2. Review of mask skills,
3. Review of out of air procedures, alternate air source and redundant air,
4. Review of buoyancy control,
5. Review of rescue techniques, and
6. Reel and line work

The **AUSI Level IV Scuba Instructor Cue Card** contains a summary of the skills to be performed.

The *AUSI Level IV Scuba Diver Training Record* is to be updated at the end of the practical session.

NOTE: 1. Instructors must never exceed the maximum instructor to student ratios described on page 1 and should reduce these where conditions, student ability or education department standards dictate the necessity.
2. Equipment used by instructors and students must comply with that outlined on page 2 in these Teaching Guidelines.

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PRACTICAL SKILLS SESSION

IV.P.1.1 Equipment Assembly

1. Watch how students assemble and handle their equipment, this can be a good indication of nervousness and experience

IV.P.1.2 Buddy Checks

1. Have students perform thorough buddy checks in preparation for ocean diving phase

IV.P.1.3 Neutral Buoyancy Check

1. Have students demonstrate neutral buoyancy on the surface without any air in their buoyancy compensator

IV.P.1.4 Regulator Skills

Have students demonstrate:

1. Regulator clearing - both methods
2. Regulator recovery
3. Regulator exchange

IV.P.1.5 Mask Skills

Have students demonstrate:

1. Partial mask clear
2. Full mask clear
3. Mask removal and replacement
4. Combined regulator and mask removal and replacement

IV.P.1.6 Out of Air Drill

1. Have students demonstrate and practice the out of air drill
2. Have students demonstrate the out of air drill without a mask
3. Test students with out of air signal without warning

IV.P.1.7 Buoyancy Control Exercises

Have students demonstrate

1. Fin pivot
2. Mid-water hover

IV.P.1.8 Redundant Air Supply

Introduce students to various types of redundant air systems and have them practice:

1. Buoyancy skills
2. Out of air procedures
3. Reel and line procedures

IV.P.1.9 Reel & Line Exercises

Demonstrate to students then have students practice:

1. Securing a line
2. Laying a line
3. Following a line
4. Reeling-in a line
5. Out of air drill while following a line

IV.P.1.10 Snorkelling in Full Scuba

1. Have students snorkel 200 m (220yds) in full scuba
2. Observe and correct poor finning technique

IV.P.1.11 Remove & Disassemble Scuba Unit

1. Watch students carefully as they exit, remove and disassemble their scuba gear
2. Encourage use of buddies

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OCEAN TRAINING DIVES

All ocean diving must be conducted in accordance to the Ocean Training Dives section of the **AUSI Instructor Course Notes**.

The ocean diving section of the AUSI Level IV Scuba Diver course consists of four compulsory, no-decompression ocean dives. No dive is to exceed 39 metres (140ft). Direct access to the surface must be maintained at all times.

On all dives over 30 metres (100ft), a decompression line, or bar with a spare air supply available at the depth of the deepest safety stop should be used and the instructor and students must carry an adequate volume of redundant air. The instructor must also be alert to the effects of Nitrogen Narcosis and increased air consumption.

All dives are to be logged by the student in their logbook.

The *AUSI Level IV Scuba Diver Training Record* is to be completed after each dive.

The **AUSI Level IV Diver Instructor Cue Card** contains a summary of the dives and skills to be performed.

Notes:

1. Instructors must never exceed the maximum instructor to student ratios described in the relevant standard and should reduce these where conditions, student ability or education department standards dictate the necessity.
2. The student's safety can be increased and the workload of the instructor decreased by the use of a certified assistant throughout the course.
3. Equipment used by instructors and students must comply with that outlined on page 2 in these teaching guidelines.

The ocean dives are described below:

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Deep Dive 1 (Orientation Dive)

AIM:

To introduce the diver to depths beyond 30m (100ft).

SITE SELECTION:

1. 30-36m (100 – 120ft) with minimum hazards
2. Preferably a site where a non-rectangular profile is possible, eg. use a wall to allow a multi-level profile.

Deep Dive 2 (Skills Dive)

AIM:

To assess the diver's aptitude at depth by performing essential skills.

SITE SELECTION:

The site should offer 30 - 33m (100 – 110ft) with minimum of hazards and preferably a clear area of sand where skills can be performed.

SKILLS TO BE ASSESSED:

1. Regulator removal and replacement,
2. Flood and clear mask,
3. Answer simple question on a slate
4. Perform air exchange at depth with buddy, and
5. Demonstrate buoyancy control at safety stops.

NOTE: All skills must be done on a one to one basis where the student is slightly negatively buoyant and the instructor is face to face with the student in a position to secure the student should a mishap occur. If unsure of student's ability a mask clear should be checked between 3 and 6 metres (10 – 20ft) on the descent.

Deep Dive 3 (Consolidation Dive)

AIM:

To introduce the diver to the limit of the standard.

SITE SELECTION:

The site should offer 36 - 39m (120 – 130ft) with minimum of hazards and preferably be non-rectangular profile.

Deep Dive 4 (Certification Dive)

AIMS:

To confirm that diver has achieved the skills desired at this level and should also be a repetitive dive (ie. within 12 hours of the previous dive).

SITE SELECTION:

The site should offer 30 - 33m (100 – 110ft) with minimum of hazards and preferably be non-rectangular profile.

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ASSESSMENT

Theory

Theory assessment is conducted continuously though out the course via lesson reviews with a final test to assess knowledge at the conclusion of the course.

Lesson reviews are found at the conclusion of each lesson in the AUSI Course Notes and:

1. Students are to complete the lesson reviews for all theory lessons,
2. Instructors are to discuss each lesson review, and
3. The Lesson Review section of *AUSI Level IV Diver Training Record* is to be signed by both student and instructor.

The *AUSI Level IV Scuba Diver Theory Test* must be administered at the conclusion of the theory section of the course and:

1. Students must score 80% to pass,
2. Instructors must review incorrect answers with the student,
3. Both the student and instructor must sign the completed answer sheet,
4. The answer sheet must be kept with the *AUSI Level IV Diver Training Record,* and
5. Students who score less than 75% must be re-tested.

Practical

When a skill has been taught and practiced satisfactorily both the instructor and the student are to sign the relevant section of *AUSI Level IVI Scuba Diver Training Record.*

During practical training sessions the instructor must personally assess combined mask and demand replacement and clear, out of air procedure, deep water descents and ascents and snorkelling techniques.

Ocean Diving

1. Students are to be continually assessed and show competence in the following areas:
   Equipment handling,
   Buoyancy control,
   Air supply monitoring,
   Buddy system,
   Dive planning,
   Entries and exits,
   Underwater navigation, and
   Correct boat diving techniques.
2. Students must be individually assessed on the skills as listed in the previous section of this manual, Ocean Dive 2, by an AUSI Level IV Scuba Instructor or higher.
3. Both instructor and student are to sign relevant section of the *AUSI Level IV Scuba Diver Training Record* when the skill or dive has been completed.

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CERTIFICATION

Before issuing certification the instructor must ensure that:

1. The diver is safe to dive to 39 metres (130ft) in daylight hours and 18 metres (60ft) at night with another diver of identical skill and knowledge,
2. All aspects of the course and appropriate assessments are complete,
3. Both student and instructor have signed the Certificate of Completion,
4. The relevant student records are accurately completed by both student and instructor, and
5. Student's dives are accurately logged in the student's logbook and counter signed by the instructor

When preparing the certification card and certificate:

1. Ensure all required details are accurately completed,
2. Ensure the Instructor signs the certificate and certification card,
3. Fill in the details of the other certification in the "previous highest certification" section of the student profile on the **AUSI Certification Sheet**, if a dual certification is issued,
4. Before printing, recheck all details,
5. Before laminating the certification card, affix passport photograph, and sign card, and
6. Issue certificate and card to student.

The Student Profile section must be returned to AUSI Head Office by the 14th day of the next month.

If certification is not issued the instructor is to ensure appropriate follow through.

Note: Plastic AUSI Certification Cards are available via www.ausi.com.au

DEBRIEF

Debrief all students ensuring the following points are covered:

1. What the qualification means,
2. Remind diver of the need to dive regularly and to seek a check out dive with an instructor if they have not dived in the previous 12 months or lost confidence,
3. Travelling overseas with the qualification,
4. Further education
5. The need for Area Orientation, and
6. Precautions:
   a) Ears,
   b) What to avoid with regard to Decompression Illness
   c) What to do about Decompression Illness, and
   d) Local diving emergency services.

Where appropriate also include the following:

1. A course assessment sheet to analyse the students impressions of the course,
2. Dive Club and Charter Boat information,
3. Dive Travel,
4. How to purchase equipment, and
5. Special package deals.

Note: Plastic AUSI Certification Cards are available via www.ausi.com.au

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AUSI LEVEL IV SCUBA DIVER

COURSE MATERIALS

AUSI MEDICAL HISTORY FORM

AUSI LEVEL IV SCUBA DIVER PARTICIPATION AGREEMENT

AUSI LEVEL IV SCUBA DIVER TRAINING RECORD

AUSI LEVEL IV SCUBA DIVER THEORY TEST

AUSI LEVEL IV SCUBA DIVER THEORY TEST - ANSWER SHEET

AUSI LEVEL IV SCUBA DIVER THEORY TEST - ANSWER TEMPLATE

AUSI LEVEL IV SCUBA CUE CARD

Please photocopy the forms for use as necessary from this section of your AUSI Instructor Manual.
OR
Registered instructors can download an AUSI Level IV Scuba Instructor Pack from www.ausi.com.au.

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Form 1 (0708) - AUSI MEDICAL HISTORY FORM

This form is used for the assessment of potential problems for persons wishing to partake in AUSI Snorkel or AUSI Scuba programs. In the interest of your safety it is important that you give true, full and complete answers to all questions. Your instructor may advise you to have a full diving medical before diving or may recommend that you do not dive at all.

IMPORTANT: Do you understand that incorrect or misleading information can lead to serious injury resulting in permanent damage or death? YES ☐ NO ☐

A. PERSONAL DETAILS

Name _____ Date of Birth ___/___/___

Address _____

Contact Email: _____ Mobile: _____ Phone: _____

Sex : Male ☐ Female ☐ Occupation _____

Where did you hear about this course? _____

B. GENERAL INFORMATION

	YES	NO	
1. Are you a non-swimmer?	☐	☐	
2. Have you ever had trouble in water?	☐	☐	Details _____
3. Have you scuba dived previously?	☐	☐	Details _____
4. Are you in good health?	☐	☐	Details _____
5. Are you on any medication?	☐	☐	Details _____
6. Operations within the last six months?	☐	☐	Details _____
7. Is there a family history of heart disease?	☐	☐	Details _____
8. Do you have any disease or disability	☐	☐	Details _____
9. Do you smoke?	☐	☐	

Pack Years (Should be < 10)

Cigarettes per day ☐ Multipliy by years of smoking ☐ Divide by 20 = ☐

	YES	NO
10. Have you consumed alcohol or any other drugs within the last 24 hours?	☐	☐
11. Will you be flying or going to altitudes above 300m within 24 hours after your last scuba dive?	☐	☐

Do you suffer from, or have you ever suffered any of the following?

12. Ear problems when flying or diving	☐	☐	16. Migraine or severe headache	☐	☐
13. Ruptured eardrum	☐	☐	17. Depression, claustrophobia or panic attacks	☐	☐
14. Chronic ear discharge or infection	☐	☐	18. Back problems	☐	☐
15. Sea sickness	☐	☐	19. Recompression for a diving related illness	☐	☐

C. MEDICAL HISTORY - Do you suffer from, or have you ever suffered any of the following?

	YES	NO		YES	NO
1. Ear surgery (other than drainage)	☐	☐	11. Pneumothorax (collapsed lung)	☐	☐
2. Persistent ringing noises or deafness	☐	☐	12. Persistent fainting or blackouts	☐	☐
3. Persistent loss of balance	☐	☐	13. Head injury requiring hospitalisation	☐	☐
4. Persistent allergies affecting nose/sinuses	☐	☐	14. Epilepsy or fits	☐	☐
5. Persistent cough or coughing blood	☐	☐	15. Any brain or spinal disorder	☐	☐
6. Recurrent chest/lung infections/problems	☐	☐	16. Diabetes	☐	☐
7. Abnormal chest pain	☐	☐	17. Heart disease	☐	☐
8. Chest surgery (heart or lung)	☐	☐	18. High blood pressure	☐	☐
9. Abnormal shortness of breath	☐	☐	19. Pulse irregularities	☐	☐
10. Asthma, wheezing or use of a puffer	☐	☐	20. Are you pregnant. or trying to be pregnant?	☐	☐

D. DECLARATION

I certify that the above information is true and complete to the best of my knowledge and I hereby authorize Dr _____ Phone # _____ to supply medical information relevant to this course regarding me to my instructor in my own personal interest.

Student's signature _____ Date ___/___/___

Instructor's signature _____ Instructor #: _____

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AUSI Level IV Scuba Diver Participation Agreement (1)

This is an important document that affects your legal rights and should be read carefully and the terms understood before signing.

THIS AGREEMENT IS BETWEEN

_____ ACN _____
(DIVE SCHOOL NAME)

of _____ in the State of _____
(Address)

AND its diving instructors, employees and agents (Hereinafter referred to as "the Dive School")

AND

_____
(NAME OF STUDENT)

of _____ in the State of _____
(Address)

(Hereinafter referred to as "the Student")

The Course

The Student wishes to participate in an Australian Underwater Scuba Instructors (AUSI) Level IV Scuba Diving Course of instruction conducted by the Dive School which will take place on dates and times to be confirmed and comprise of one theory module, one practical training session and four ocean dives ("the Course").

The Dive School agrees to provide to the Student as part of the Course the following:

☐ Course Materials	☐ Certification	☐ Snorkelling Equipment
☐ Air Fills	☐ Boat Hire	☐ Wetsuit & Weight Belt
☐ Pool Entrance	☐ Accommodation	☐ Scuba Equipment

In consideration of the Dive School conducting the Course the Student has agreed to pay the Dive School the sum of $_____ to participate in the Course ("the Course fee"). The Student acknowledges the Course fee does not include the cost of additional theory lectures, practical training sessions and ocean dives which the Dive School may determine the student must undertake in order to complete the Course. The Student also agrees to pay for any lost or damaged equipment that has been issued to the Student by the Dive School for their use during the Course.

If the Dive School in its absolute discretion determines the student has successfully completed the Course and otherwise satisfied AUSI Standards and Procedures, the Student will be issued with an AUSI Level IV Scuba Diver certification.

Statement of Limitations

Upon successful completion of the course the Student will have been taught by the Dive School the general principles of scuba diving theory and practice and will have the experience of at least four supervised ocean dives to a maximum depth of 39 metres (130 ft). The Student acknowledges that the Course provides limited theoretical and practical training and experiences sufficient to enable the Student to participate in recreational scuba dives in open water to a maximum depth of 39 metres (130 ft) during daylight hours and 18 metres (60 ft) at night with direct vertical access to the surface. The Student also acknowledges that without further training and experience they should only undertake dives appropriate to their level of training and experience. The Student further acknowledges that area orientation is required and that a neutral buoyancy check is required any time that different equipment is used.

WARNING - RISKS OF SNORKELLING AND SCUBA DIVING

BY SIGNING THIS DOCUMENT YOU EXPRESSLY ASSUME ALL THE RISKS, HAZARDS AND DANGERS ASSOCIATED WITH SNORKELLING AND SCUBA DIVING.

The Dive School hereby provides the Student with notice to warn him/her of the inherent risks, hazards and dangers of recreational snorkelling and/or scuba diving:

☐ 1. The underwater environment is alien to human beings and as a consequence snorkel and scuba diving are risk inherent adventure activities which expose participants to the risk of serious injury or death.

☐ 2. Many of the physiological effects on the human body due to the underwater environment and the pressure changes experienced whilst scuba diving are not properly understood.

☐ 3. The long-term effects of scuba diving on the human body are generally either not known or not properly understood and there may be adverse health effects on the human body resulting from scuba diving which are presently unknown or not fully known.

☐ 4. No decompression table or diving computer is completely safe and despite observance of safe diving practices, including diving within the tables or in accordance with the dive computer calculations, there is an inherent risk of developing decompression illness.

☐ 5. Communication under water is limited to hand signals and, as a consequence of reduced visibility or separation, communication between the instructor and the Student may be difficult or not possible.

☐ 6. Snorkel and scuba diving can involve strenuous physical exertion under certain conditions which may include swimming underwater or on the surface against a current or tidal stream, in rough seas over long distances.

☐ 7. The taking of various medications or drugs may have adverse health effects resulting from pressure changes associated with scuba diving. These are or may be unknown and medical advice should be obtained from an appropriately qualified diving doctor.

The Student expressly acknowledges he/she understands that recreational snorkel and scuba diving involves risk, hazards and dangers which could result in serious injury or death. The Student nevertheless wishes to participate in the Course and willingly accepts and expressly assumes all such risks, hazards and dangers.

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AUSI Level IV Scuba Diver Participation Agreement (2)

Liability Release and Indemnity Agreement

The Student, in consideration of the Dive School agreeing to accept his/her participation in, and to instruct the Student during the Course, agree to release the Dive School from all loss, damage, claims, demands, suits, actions or proceedings of any kind directly or indirectly arising out of or resulting from an accident or happening, equipment failure, latent conditions, damage, death, injury or loss arising or occurring to or suffering by him/her during or after the Course or during of after any subsequent snorkel or scuba diving activity or related activity whether or not the same shall have been caused by, or contributed to in whole or in part to the negligence of or breach of contract by the Dive School.

The Student expressly acknowledges that he/she is in good health and is not aware of any medical or health reason why he/she should not participate in scuba or snorkel diving and he/she has fully and truthfully disclosed to the Dive School and any doctor examining him/her for the purpose of determining his/her fitness to dive:-

(i) any medical or health condition suffered by or affecting him/her of which he/she is aware;

(ii) all medications or drugs which he/she is taking or takes from time to time;

The Student expressly acknowledges that he/she has read and understood this agreement, and specifically the waiver of legal rights and notice warning of some of the risks inherent in the activities of snorkel and scuba diving, and agrees to be bound by them.

This agreement does not purport to or have the effect of excluding, restricting or modifying the application of any of the provisions of the *Fair Trading Act* or the *Trade Practices Act* or the exercise of a right conferred by any such provision or any liability for a breach of condition or warranty implied by such provision.

SIGNED for and on behalf of

)

[name of Dive School] ……) X

) ……

SIGNED SEALED AND DELIVERED by the said

)

[name of Student] ……..……..) X

) ……

in the presence of

Witness xx ……..

IF THE STUDENT IS UNDER THE AGE OF 18 YEARS THIS AGREEMENT IS TO BE READ CAREFULLY AND THEN SIGNED BY THE STUDENT'S PARENTS OR LEGAL GUARDIAN WHERE INDICATED BELOW:

In consideration of the Student being permitted to undertake the Course I, _____, being at least eighteen years of age and the parent or legal guardian of the Student, on behalf of myself and the Student, agree to be bound by the terms and conditions of this agreement. I hereby acknowledge that I have read and understood this agreement, in particular, the Statement of Limitations, Express Assumption of Risk Agreement and the Liability Release and Indemnity Agreement and hereby give my consent to the Student participating in the Course with full knowledge of the inherent risks involved.

I expressly acknowledge that the Student is in good health and that I am not aware of any medical or health reason why he/she should not participate in scuba or snorkel diving and that I have fully and truthfully disclosed to the Dive School and any doctor examining him/her for the purpose of determining his/her fitness to dive:-

(i) any medical or health condition suffered by or affecting him/her of which he/she is aware;

(ii) all medications or drugs which he/she is taking or takes from time to time;

SIGNED SEALED AND DELIVERED by the said

)

[name of Father/Mother/Legal Guardian] ……..……..) X

) ……

in the presence of

Witness xx ……..

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AUSI LEVEL IV SCUBA DIVER TRAINING RECORD (1)

Student's Name: _____ **Course No.:** _____

PREREQUISITES: (as per AUSI Instructor Manual - Level IV Scuba Diver Standards)

Medical statement	❑
At least 16 years of age	❑
AUSI Level III or approved equivalent	❑
16 ocean dives: 4 to at least 24 m (80 ft)	❑

Comments

SATISFIED ALL PREREQUISITES	Student to sign	Instructor to sign	Instructor No.	Date

THEORY INSTRUCTION: (as per AUSI Level IV Scuba Diver Course Notes)

Class	Date	Student	Instructor	No.	Review	Date	Student	Instructor	No.
LII/1					LII/1				
Test					Mark				

SATISFACTORY COMPLETION OF THEORY COMPONENT	Student to sign	Instructor to sign	Instructor No.	Date

PRACTICAL INSTRUCTION: (as per AUSI Instructor Manual - Level IV Scuba Diver Teaching Guidelines)

Date _____ **Instructor** _____ **No.** _____

Practical Skills	Student
01 Neutral buoyancy check	
02 Regulator skills	
03 Mask Skills	
04 Out of air drill	
05 Mid-water hovers	
06 Redundant air systems	
07 Secure a line	
08 Lay a line	
09 Follow a line	
10 Reel in a line	
11 Out of air on a line	

Comments

SATISFACTORY COMPLETION OF PRACTICAL SKILLS	Student to sign	Instructor to sign	Instructor No.	Date

Comments

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AUSI LEVEL IV SCUBA DIVER TRAINING RECORD (2)

Student's Name: _____ **Course No.:** _____

OCEAN DIVING: (as per AUSI Instructor Manual - Level IV Scuba Diver Teaching Guidelines)

Dive	Date	Site	Depth	Dive Time	Vis	Current	Surface Conditions	Instructor's Signature if OK	No.
1									
2									
3									
4									

Ocean Skills at 30-39 m (100 – 130 ft)	Dive #	Student	Instructor	No.
Regulator - remove & replace				
Mask - flood & clear				
Answer questions on slate				
Air exchange with buddy				
Buoyancy at safety stops				

Comments

SATISFACTORY COMPLETION OF OCEAN DIVING SKILLS	Student to sign	Instructor to sign	Instructor No.	Date

CERTIFICATION REQUIREMENTS: (as per AUSI Instructor Manual - Level IV Scuba Diver Standards)

- Satisfactory theory test ❑
- Completed theory component ❑
- Completed practical skills training ❑
- Logged a minimum of 20 ocean dives ❑
- Logged four ocean dives to at least 30m ❑
- Satisfactorily completed all ocean skills ❑

Comments

Comments

AUSI LEVEL IV SCUBA DIVER CERTIFICATE OF COMPLETION

I _____ on this day _____ hereby state that the above record of my AUSI Level IV Scuba Diver training is correct and that I understand the general principles of scuba theory taught to me and feel proficient and confident of performing the practical skills taught to me and acknowledge I am trained to dive with another similarly qualified and experienced diver in daylight hours to a depth of 39 metres (130 ft) in open water with direct vertical access to the surface without the direct supervision of an instructor and further acknowledge that area orientation is required and that a neutral buoyancy check needs to be done when using different equipment and I also acknowledge that I am not trained for penetration diving.

Student's Signature: _____

Certifying Instructor's Signature: _____

Certifying Instructor's Number: _____

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AUSI LEVEL IV SCUBA DIVER
THEORY TEST (Metric - 1005)

DIRECTIONS:

- Do not mark question sheet
- Write name, date and course number on the answer sheet
- Circle the best answer - there is only one correct answer
- Write all answers on the answer sheet provided
- Answer all questions
- A score minimum of 80% (20/25) is required to pass

1. An AUSI Level IV Scuba Diver can:

a) dive to 39m during daylight hours or at night
b) dive with another diver to 39m
c) dive to 18m at night and 39m during daylight hours with another similarly qualified diver
d) dive to 18m at night and 39m during daylight hours with any other qualified diver

2. What is considered to be the recreational scuba limit on air?

a) 18 metres
b) 30 metres
c) 39 metres
d) 60 metres

3. The greatest relative pressure and volume change occurs between:

a) 0 - 10 metres
b) 10 - 20 metres
c) 20 - 30 metres
d) 30 - 40 metres

4. At 39 metres a divers air consumption will be:

a) approximately 2 times greater than at the surface
b) approximately 3 times greater than at the surface
c) approximately 4 times greater than at the surface
d) approximately 5 times greater than at the surface

5. What is the most common symptom of excess carbon dioxide?

a) headache
b) dizziness
c) nausea
d) tingling

6. A diver surfaces after a dive to 24 metres after a bottom time of 20 minutes. Within a few minutes the diver complains of difficulty breathing and dizziness and then blacks out. What should the diver be treated for?

a) delayed onset Decompression Illness
b) immediate onset Decompression Illness
c) carbon monoxide poisoning
d) blue ringed octopus bite

7. The correct first aid for a conscious person with suspected bubble trouble (Decompression Illness) is:

a) lay on left side; feet up; 100% oxygen; call DES; treat for shock; monitor vital signs
b) lay flat; feet up; 100% oxygen; call DES; treat for shock; monitor vital signs
c) lay flat; 100% oxygen; call DES; treat for shock; monitor vital signs
d) recovery (coma) position; 100% oxygen; call DES; treat for shock; monitor vital signs

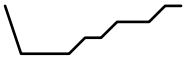
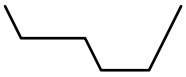
8. The Australian DES phone number is:

a) 1800 008 200
b) 1800 088 200
c) 1800 800 200
d) 1800 808 200

9. Before using a new dive computer for the first time the most important thing to do is:

a) to plan a safe profile
b) use it conservatively
c) not to plan decompression dives
d) to read the instruction manual

10. Which of the following dive profiles is considered most dangerous?

a) 
b) 
c) 
d) 

11. Why is diving beyond the no-decompression limits (ie decompression diving) dangerous?

a) increased risk of nitrogen narcosis
b) not enough air available in a normal cylinder
c) in an emergency the surface is not immediately available
d) all of the above

12. An oily taste or smell in scuba air may also indicate the presence of which substance?

a) carbon monoxide
b) carbon dioxide
c) nitrogen
d) oxygen

13. An emergency decompression cylinder (hang tank) should be hung at:

a) the deepest scheduled stop with air turned on
b) the deepest scheduled stop with air turned off
c) the shallowest scheduled stop with air turned on
d) the shallowest scheduled stop with air turned off

14. Which of the following is most important to have available when deep diving?

a) oxygen for first aid purposes
b) fluids for rehydration
c) radio and/or mobile phone
d) all of the above

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15. If you are feeling mildly seasick it is best to:
a) go to the bottom and relax
b) descend to about 2 metres but abort the dive if still feeling unwell
c) use your safety regulator in case you vomit
d) stay on the boat

16. Which of the following should be avoided after deep diving?
a) driving through hills or mountains in excess of 300m high
b) flying for at least 24 hours
c) vigorous exercise for at least 12 hours
d) all of the above

17. If you are on a seven day diving holiday it is recommended to:
a) do no more than three dives per day
b) take a day off diving mid way through the holiday
c) avoid excess intake of alcohol
d) all of the above

18. If you suspect nitrogen narcosis, after signaling your buddy you should:
a) continue the dive cautiously
b) ascend to a shallower depth
c) stop for a minute
d) terminate the dive

19. On a deep dive you should commence your ascent before your contents gauge reads:
a) 50 atm
b) 70 atm
c) 100 atm
d) 120 atm

20. If out of air, after giving the appropriate signal you would expect to:
a) breathe off your safety regulator
b) breathe off your buddy's safety regulator
c) do an emergency free ascent
d) breathe off your buddy's main regulator

21. Emergency free ascents are dangerous due to the risk of:
a) immediate onset Decompression Illness
b) delayed onset Decompression Illness
c) sudden unconsciousness
d) all of the above

22. When completing a safety stop a diver's:
a) chest should be at the exact depth of the stop
b) eyes should be at the exact depth of the stop
c) body should have some part at the depth of the stop
d) depth gauge should be at the exact depth of the stop

23. Select the best regulator combination:
a) an unbalanced first stage with servo-assisted second stage
b) an unbalanced first stage with conventional second stage
c) a balanced first stage with servo-assisted second stage
d) a balanced first stage with a tilt valve second stage

24. A DIN valve must be used for scuba cylinders when their working pressure exceeds:
a) 150 atm
b) 210 atm
c) 225 atm
d) 240 atm

25. In Australia medical oxygen cylinders are:
a) black
b) white
c) black top with white bottom
d) black bottom with white top

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AUSI LEVEL IV SCUBA DIVER
Theory Test - Answer Sheet (1005)

Name: _____ **Date:** _____ **Course No.:** _____

CIRCLE CORRECT ANSWER - QUESTIONS HAVE ONLY ONE CORRECT ANSWER

1.	**a.**	**b.**	**c.**	**d.**	☐
2.	**a.**	**b.**	**c.**	**d.**	☐
3.	**a.**	**b.**	**c.**	**d.**	☐
4.	**a.**	**b.**	**c.**	**d.**	☐
5.	**a.**	**b.**	**c.**	**d.**	☐
6.	**a.**	**b.**	**c.**	**d.**	☐
7.	**a.**	**b.**	**c.**	**d.**	☐
8.	**a.**	**b.**	**c.**	**d.**	☐
9.	**a.**	**b.**	**c.**	**d.**	☐
10.	**a.**	**b.**	**c.**	**d.**	☐
11.	**a.**	**b.**	**c.**	**d.**	☐
12.	**a.**	**b.**	**c.**	**d.**	☐
13.	**a.**	**b.**	**c.**	**d.**	☐
14.	**a.**	**b.**	**c.**	**d.**	☐
15.	**a.**	**b.**	**c.**	**d.**	☐
16.	**a.**	**b.**	**c.**	**d.**	☐
17.	**a.**	**b.**	**c.**	**d.**	☐
18.	**a.**	**b.**	**c.**	**d.**	☐
19.	**a.**	**b.**	**c.**	**d.**	☐
20.	**a.**	**b.**	**c.**	**d.**	☐
21.	**a.**	**b.**	**c.**	**d.**	☐
22.	**a.**	**b.**	**c.**	**d.**	☐
23.	**a.**	**b.**	**c.**	**d.**	☐
24.	**a.**	**b.**	**c.**	**d.**	☐
25.	**a.**	**b.**	**c.**	**d.**	☐

TEST SCORE: _____ **/ 25** **PASS / FAIL**

STUDENT DECLARATION

I _____ on this day _____ hereby declare that I have discussed my incorrect answers with my instructor _____ # _____ and I acknowledge my understanding in those areas.

Signature: _____ Instructor's Signature: _____ Number: _____

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AUSI LEVEL IV SCUBA DIVER
Theory Test - Answer Template (1005)

1.			○		☐
2.			○		☐
3.	○				☐
4.				○	☐
5.	○				☐
6.		○			☐
7.			○		☐
8.		○			☐
9.				○	☐
10.	○				☐
11.			○		☐
12.	○				☐
13.		○			☐
14.				○	☐
15.		○			☐
16.				○	☐
17.				○	☐
18.		○			☐
19.			○		☐
20.		○			☐
21.				○	☐
22.	○				☐
23.			○		☐
24.			○		☐
25.				○	☐

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AUSI LEVEL IV PRACTICAL & OCEAN SKILLS

PRACTICAL TRAINING SESSION

- Equipment assembly
- Buddy checks
- Neutral buoyancy check
- Regulator skills
- Mask skills
- Out of air drills & Redundant air systems
- Mid-water hovers
- Secure a line
- Lay a line
- Follow a line
- Reel in a line
- Out of air on a line
- Snorkel 200 m (220 yd) in full scuba gear
- Remove & disassemble scuba unit

STUDENT OCEAN DIVING BRIEF

- Boat information (where appropriate)
- Purpose of dive
- Site description
- Hazards
- Entry
- Descent
- Dive plan
  - depth
  - bottom time
  - low air
- Ascent and safety stops
- Exit
- Emergency procedures
  - lost buddy procedure
  - low air & out of air
  - nitrogen narcosis
- Warn about ear & lung pressure injuries

PRACTICAL SKILLS REVISION SESSION SHOULD EXTEND STUDENTS

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AUSI LEVEL IV PRACTICAL & OCEAN SKILLS

DEEP DIVE 1 (Orientation)

Aim: Introduce diver to depth beyond 30m
Site: - 30-36 m (100 – 120 ft)
- minimum hazards
- preferably non-rectangular profile

DEEP DIVE 2 (Skills)

Aim: Perform essential skills at depth
Site: - 30-33 m (100 – 110 ft) min. hazards
- needs bottom for performing skills

Skills:

- Regulator - remove and replace
- Mask - flood and clear
- Air exchange with buddy
- Answer questions on slate
- Buoyancy control at safety stops

Warnings:

- Do skills one on one
- Keep very close to student doing skills

DEEP DIVE 3 (Consolidation)

Aim: Introduce diver to limit of standard
Site: - 33-39 m (110 – 130 ft)
- minimum hazards
- preferably non-rectangular profile

DEEP DIVE 4 (Certification)

Aim: Repetitive & final assessment dive
Site: - 30-33 m (100 – 110 ft)
- minimum hazards
- preferably non-rectangular profile

POST DIVE PROCEDURES

- Check health and well being of students
- Discuss exciting aspects of dive
- Discuss correction of techniques
- Accurately complete log book
- Accurately complete record of training
- Emphasise things to avoid after diving
- Remind about DCI and what to do

PLAN DIVES CONSERVATIVELY & BEWARE OF NITROGEN NARCOSIS

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