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6. Intermediate Freediver

6.1 Introduction

This follow-up program to the PFI Freediver course continues to develop the comfort and safety skills of basic level freediving. The PFI Intermediate Freediver is the foundation program for the PFI Advanced Freediver as well as professional programs. It brings a whole knowledge approach introducing skills and techniques as well as a high-level of knowledge in physics, physiology, and safety & problem management. During this program participants work in depths as deep as 40 metre/132 Feet while learning valuable warm-up skills to enhance this capacity. This program encompasses static apnea and may also introduce dynamic apnea. A PFI Intermediate Pool Only certification may be issued to those not wishing to participate in open water training.

6.2 Course Objectives

This program will also focus on a high level of safety & problem management by learning how to take care of black-outs underwater and initiating BLS recovery procedures while also developing appropriate kick cycles while also developing the sink phase part of negative buoyancy.

6.3 Program Prerequisites

- 1. Minimum age of 12 for Junior Intermediate Freediver or 16 years for Intermediate Freediver.
- 2. Competent swimming skills.
- 3. PFI Freediver or equivalent skill level.

6.4 Required Student Equipment

- 1. Freediving quality mask, fins and snorkel.
- 2. Freediving quality exposure protection (appropriate for local environment).
- 3. Freediving quality weight belt and weights (appropriate for local environment).
- 4. A timing device (preferred freediving computer or gauge).

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6.5 Support Materials

Student Materials:

- 1. PFI Medical Statement.
- 2. PFI Liability and Assumption of Risk Form.
- 3. PFI Intermediate Manual or eLearning.

Instructor Materials:

- 1. PFI Intermediate Freediver Instructor Manual.
- 2. PFI Intermediate Freediver Instructor Guide.
- 3. PFI Intermediate Freediver final exam and answer sheet.

6.6 Qualification of Graduates

- 1. Upon successful completion of this course, graduates may engage in buddy supported freediving activities appropriate for the environment without direct supervision of an instructor to depths no greater than 40 metre/132 Feet.
- 2. Upon successful completion of this course, graduates are qualified to enroll in the Intermediate Freediver Coaching, Advanced Freediver, Open line Diving, Freediver Safety, and Specialty Freediver programs.
- 3. Divers may be certified with an Intermediate Freediver-Pool Only certification after successfully completing all knowledge Development and Confined Water training sessions.

There is no open water training necessary for this level of certification and divers at this level are not certified for any open water activities.

6.7 Who May Teach

This course may be taught by any active PFI Intermediate Freediver Instructor. The PFI Intermediate Freediver Instructor may use active status PFI Assistant Intermediate Instructors to increase student ratios.

To qualify as a PFI Assistant Intermediate Freediver Instructor:

- 1. Active PFI Freediver Instructor.
- 2. 21 years of age.
- 3. Have certified at least 20 students, 10 of which must be at the Freediver level.

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- 4. Fully assist with all components of at least one Intermediate Freediver course with an Intermediate Freediver Instructor.
- 5. Complete demonstration quality 40 metre/132 Feet CWT and FIM dives.
- 6. Be issued the Assistant Intermediate Freediver Instructor Rating from a qualified Intermediate Freediver Instructor.

6.8 Student to Instructor Ratio

Classroom:

1. Unlimited so long as adequate facilities, supplies and time are provided to ensure comprehensive and complete training.

Confined Water:

- 1. A maximum of eight students to one PFI Intermediate Freediver Instructor (8:1).
- 2. A maximum of twelve students to one PFI Intermediate Freediver Instructor (12:1 max) with the use of active status PFI Assistant Intermediate Freediver Instructors.

Open Water:

- 1. A maximum of six students to one PFI Intermediate Freediver Instructor (6:1).
- 2. A maximum of ten students to one PFI Intermediate Freediver Instructor (10:1 max) with the use of active status PFI Assistant Intermediate Freediver Instructors.

6.9 Course Structure and Duration

General Execution:

- 1. No more than 2 in-water sessions per day.
- 2. Training sessions must be completed during daylight hours, or under conditions that simulate daylight conditions.
- 3. All skills are to be briefed, practiced, evaluated, and debriefed by the PFI Intermediate Freediver Instructor or PFI Assistant Intermediate Freediver Instructor.
- 4. During all skills, students will act in a buddy team (buddy A diver, buddy B safety) during all skills to promote team freediving.

Confined Water Execution:

1. Students must complete a minimum of 2 confined water sessions.

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- Maximum confined water training session of 10 metre/33 Feet for confined water skills, 40 metre/132 Feet for open water skills for Intermediate Freediver Deep Pool Only certification.
- 3. Students should, where applicable, treat the confined water as an 'open water environment' and employ all protocols consistent with open water freediving.

Open Water Execution:

- 1. Students must complete a minimum of 2 open water sessions with 3 recommended.
- 2. Training depth must be between 25 to 40 Metre/82 to 132 Feet; the maximum depth may not exceed 40 Metre/132 Feet.

Course Structure:

1. PFI Allows Instructors to structure courses according to the number of students participating and their skill level.

Duration:

1. The suggested number of total course training hours is 24.5.

6.10 Administrative Requirements

- 1. Collect the course fees from all the students.
- 2. Ensure the students have the required equipment.
- 3. Communicate the schedule to the students.
- 4. Have the students complete:
 - a. PFI General Liability and Express Assumption of Risk Form
 - b. PFI Medical History Form

6.11 Knowledge Development Overview

The following topics must be covered during this course by the PFI Intermediate Freediver Instructor and/or active status PFI Assistant Intermediate Freediver Instructor as outlined in the PFI General Standards and Procedures section. Instructors may use additional texts or materials they feel help present these topics.

The following topics must be covered during this course:

- 1. Introduction:
 - a. Participant and staff introductions.
 - b. Course overview.

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- c. Paperwork and prerequisites.
- d. Equipment requirements check.
- e. Classroom, Confined and Open Water protocols and conduct.
- f. Safety/supervision practices.
- 2. History of Freediving:
 - a. Origin of freediving
 - i. Roman and Greek armies.
 - ii. Ama Freedivers.
 - iii. Modern day freediving.
- 3. Safety & Problem Management:
 - a. Freediving supervision:
 - i. Supervision.
 - ii. Proximity.
 - iii. Technique.
 - b. Safety for depth freediving:
 - i. Styles of depth freediving.
 - ii. Constant ballast.
 - iii. Constant ballast no-fins.
 - iv. Free immersion.
 - v. Rule of 9's.
 - vi. Positioning and proximity:
 - 1. Safety depth meet at 1/3 Freediver's max depth:
 - a. Safety time intercepts Freediver 10 seconds after reaching safety depth (dive time +10 seconds)
 - vii. 2, 3 and 4 person teams.
 - c. Safety and signals for static apnea:
 - i. What is static apnea.
 - ii. Why train in static apnea.
 - iii. Signals.
 - iv. Two strikes rule.

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- v. Target times.
- vi. Exiting a static apnea.
- vii. Responding to emergencies.
- d. Safety for dynamic:
 - i. What is dynamic apnea.
 - ii. Why train in dynamic apnea.
 - iii. Safety positioning.
 - iv. Responding to emergencies.
- e. Performance evaluations:
 - i. Determine the next target time, depth, and distance.
 - ii. The 10 evaluation criteria:
 - 1. Tired/exhaustion.
 - 2. Technique.
 - 3. Equalizations.
 - 4. Near-blackout/blackout.
 - 5. Urge to breath/contractions.
 - 6. Pressure contractions.
 - 7. Tired legs/failure.
 - 8. Equipment performance.
 - 9. Chest compression/squeeze.
 - 10. Narcosis.
- f. Self-bailout underwater:
 - i. Steps of self-bailout:
 - 1. Terminate the Freedive.
 - 2. Use line for assistance.
 - 3. Signal buddy for help.
 - 4. Release weight belt and hold it in hand for future release.
 - 5. Drop weight belt.
 - 6. Keep your eyes open.
 - 7. Discontinue freediving day with any signs of hypoxia.

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- 8. Moderate freediving time, depth, distance, exertion.
- g. Assisted bailout underwater:
 - i. Bailout signal:
 - 1. Hand signal and/or head signal.
 - 2. Started before reaching safety at depth.
 - ii. Line signals:
 - 1. Safety lightly holds line and feels for pulls.
 - iii. Provide support and propulsion.
 - iv. Under arm, waist, or hands.
 - v. Utilize ascent line for propulsion assistance if possible.
 - vi. Monitor airway for LMC/BO.
 - vii. Ditch weight belt if required.
- h. Protective breathing reflexes:
 - i. Cessation of breathing.
 - ii. Restart breathing response with blow tap talk.
 - iii. Laryngospasms.
- i. Freediver rescue breathing (FRB):
 - i. Create airway by 'dosey doe' position and head tilt.
 - ii. Remove mask.
 - iii. Three blow-tap-talks (BTT).
 - iv. Call for assistance.
 - v. Rescue breaths.
- j. Near-blackouts (LMC):
 - i. Near Blackout/LMC/Samba.
 - ii. Signs and Symptoms of near blackout/LMC.
 - iii. Assisting an LMC underwater.
 - iv. Assisting an LMC at the surface.
- k. Blackouts (BO):
 - i. Depth vs. Apnea Hypoxia.
 - ii. Signs and symptoms of Blackouts/BO.

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- iii. Assisting Blackouts at the surface.
- iv. Assisting blackouts underwater.
- I. Buddy separation:
 - i. Surface.
 - ii. Underwater.
 - 1. Search patterns:
 - a. U patterns.
 - b. Expanding square.
- 4. Equipment for Intermediate Freediving
 - a. Masks:
 - i. Types.
 - ii. Features and materials.
 - iii. Proper maintenance.
 - b. Fins:
 - i. Mono-fins vs long fins.
 - ii. Benefits of long blade fins.
 - iii. Blade materials.
 - iv. Full foot vs. open heel foot pockets.
 - v. How to properly fit a fin.
 - vi. Proper maintenance.
 - c. Snorkels:
 - i. Features of a good freediving snorkel.
 - ii. Placement of snorkel on mask strap.
 - iii. Use.
 - iv. Proper maintenance.
 - d. Exposure protection:
 - i. Wetsuits:
 - 1. Types.
 - 2. Features and materials.
 - ii. Hoods:

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- 1. Types.
- 2. Features and materials.
- iii. Gloves:
 - 1. Types.
 - 2. Features and materials.
- iv. Socks:
 - 1. Types.
 - 2. Features and materials.
- e. Freediving computers:
 - i. Freediving computer vs timers:
 - 1. Types.
 - 2. Features.
 - 3. Care and maintenance.
- f. Weight systems:
 - i. Types of weight systems.
 - ii. Rubber vs. nylon belts.
 - iii. Weights.
 - iv. Proper placement of belt.
 - v. Buckles.
 - vi. Accessories and maintenance.
- g. Lines, flags and floats:
 - i. "Diver Below Flag".
 - ii. Alpha Flag.
 - iii. Floats.
- h. Accessory freediving equipment:
 - i. Nose clips & fluid goggles.
 - ii. Gear bags.
 - iii. Freediving knives.
 - iv. Lights and markers.
 - v. Goodie bags and stringers.

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5. In-Water Environment:

- a. Local aquatic animal and plant life.
- b. Hazardous animals and plants.
- c. Animals/plants of interest.
- d. Local environmental conditions:
 - i. Fresh vs salt.
 - ii. Temperature and thermoclines.
 - iii. Visibility.
 - iv. Wind, waves and currents.
 - v. How to assess and plan accordingly.
 - vi. Sea sickness medications.
- e. Local freediving procedures.
- f. Entry/exit procedures.
- 6. Freediving Breathing Techniques:
 - a. Respiratory muscles/breathing segments:
 - i. Diaphragm.
 - ii. Intercostal.
 - iii. Scalene/subclavian.
 - iv. Neck.
 - b. Breathing techniques:
 - i. Normal ventilations.
 - ii. Ventilations.
 - iii. Purging.
 - iv. Peak Inhalation.
 - c. Specialty breathing techniques:
 - i. Packing.
 - ii. Reverse packing.
 - d. Recovery breathing:
 - i. Hook breaths.
 - ii. Cleanse breaths.

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- iii. Pool static/dynamic recovery breaths.
- iv. Ocean depth/constant ballast/free immersion recovery breaths.
- v. Safety Procedures.
- e. Breathing exercises:
 - i. Segmented breathing.
 - ii. Negative diaphragm.
 - iii. Packing stretches.
 - iv. Reverse packing.
- 7. Equalization Techniques body:
 - a. Equalizing ears, sinuses and mask.
 - b. Methods of equalizing:
 - i. Frequency.
 - c. Equalizing Issues.
 - d. Masks.
- 8. Physics of Freediving:
 - a. Depth and pressure:
 - i. Biggest change in our physiology.
 - ii. Weight 100 km/62 miles of atmosphere = 14.7 psi/1 bar/ 1 ATA at sea level.
 - iii. Every 10 metre/33 Feet of sea water is the equivalent of 1 ATA.
 - b. Pressure and volume:
 - i. Boyles Law.
 - ii. 5 airspaces affected by Boyle's law.
 - 1. Lungs, ears, sinuses, mask, wetsuit.
 - 2. Lung compression vs importance of small mask volumes.
 - 3. Not losing air during descents due to equalizing.
 - 4. Re-inhale mask air volume during ascent.
 - c. Partial pressures:
 - i. Daltons law of pressures.
 - ii. Effects of varying partial pressures of O2 during a Freedive.

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- d. Buoyancy principles:
 - i. Archimedes' principle.
 - ii. Three states of buoyancy.
 - iii. Effects of buoyancy.
 - iv. Descents and ascent techniques.
- e. Streamlining and hydrodynamics:
 - i. Density of water versus air.
 - ii. Drag and hydrodynamics.
- 9. Physiology of Freediving:
 - a. Nervous system:
 - i. Central nervous system:
 - 1. Peripheral nervous system.
 - 2. Sympathetic/Parasympathetic nervous system.
 - b. Circulatory system:
 - i. Purpose.
 - ii. Functions.
 - iii. Differences between sexes.
 - iv. Relation to freediving.
 - c. Respiratory system:
 - i. Purpose.
 - ii. Functions.
 - iii. Differences between sexes.
 - iv. Relation to freediving.
 - d. Lung volumes and freediving:
 - i. Pulmonary function test.
 - ii. Main lung volume measurements:
 - 1. Inspiratory volume (IV).
 - 2. Expiratory volume (EV).
 - 3. Vital capacity (VC).
 - 4. Functional residual capacity (FRC = EV + RV).

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- 5. Packing volume (PV).
- e. What makes us breathe:
 - i. Reflex respiratory center (RRC).
 - ii. Chemoreceptors.
 - iii. Stretch receptors.
- f. Types of blackouts:
 - i. 3 freediving blackouts:
 - 1. Static blackout.
 - 2. Ascent blackout.
 - ii. Whiteout.
 - iii. Excessive hyperventilation.
 - iv. Excessive lung expansion.
 - v. CO2/N2 blackouts.
 - vi. Barotrauma blackouts.
- g. Aquatic adaptations:
 - i. Mammalian diving reflex.
 - ii. Four main adaptations.
 - iii. Blood shunting or blood prioritization:
 - 1. Effects of immersion.
- h. Pressure and body airspaces:
 - i. Airspaces in the body:
 - 1. Elastic.
 - 2. Rigid.
 - 3. Semi-rigid.
 - ii. Intestinal squeeze.
- i. Barotraumas pressure related injuries:
 - i. Middle ear.
 - ii. Barotitis media:
 - 1. Alternobaric vertigo.
 - iii. Transient vertigo.

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- iv. Mask squeeze.
- j. Physiological stresses and dangers:
 - i. Hypoxia.
 - ii. Hypercapnia.
 - iii. Hypocapnia.
 - iv. Decompression sickness.
- 10. Psychology of Freediving:
 - a. Anxiety Stimulus:
 - i. Physiology of stress.
 - ii. Causes:
 - 1. Physical Stress.
 - 2. Physiological Stress.
 - 3. Psychological Stress.
 - iii. Stress Reduction:
 - 1. Stop Think Act.
 - 2. Employ Psychological techniques.
 - iv. Self-talk.
 - v. Step by step.
 - vi. Compensatory changes.
 - vii. Visualization.
- 11. Training Programs for Freediving:
 - a. In-Water Training Exercises:
 - i. Confined Water Skills & Techniques.
 - ii. Open Water Skills & Techniques.
 - iii. Communications.

6.12 Confined Water

To be certified as a PFI Intermediate Freediver a student must demonstrate the following skills to the satisfaction of the PFI Instructor as follows:

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- 1. Watermanship and Stamina (May be completed in open water. If done in open water, must be completed prior to any other open water skills):
 - a. Distance swim of 200 Metre nonstop using any stroke without the use of swimming aids (mask or swim goggles may be used), or 300 Metre nonstop using mask, snorkel, and fins.
 - b. Tread water for 10 minutes without flotation.

Note: If an exposure suit is worn for any of the above skills, the wearer must be neutrally buoyant at the surface.

- 2. Snorkel Breathing:
 - a. Swim continuously at the surface without a mask for a minimum of 25 metre/82 Feet without removing your face from the water while breathing continuously through the snorkel.
- 3. Open Water Freedive Simulation:
 - a. Breathe up.
 - b. Remove snorkel.
 - c. Descent with proper head position.
 - d. Appropriate kick cycles to simulate freediving to 20 metre/66 Feet plus 10 seconds relaxed kicking against the bottom.
 - e. Ascent with proper head position.
 - f. Drop arms at 10 metre/33 Feet (simulated depth) and shallower.
- 4. Static and Dynamic Apnea:
 - a. Static apnea:
 - i. As a breath-holder student must complete a minimum of 4 consecutive static breath-holds:
 - 1. 1st session vent hold purge ratios:
 - a. 2 minutes 1 minute no purging.
 - b. 3 minutes 2 minutes purges start at approximately 0:30 minute.
 - c. 4 minutes 3 minutes purges start at approximately 0:45
 - d. 5 minutes 4 minutes purges start at approximately 1:00 minute.
 - 2. 2nd optional static session vent hold purge ratios:

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- a. 3 minutes 2 minutes no purging.
- b. 4 minutes 3 minutes purges start at approximately 0:30 minute.
- c. 5 minutes 4 minutes or unlimited purges start approximately 1:15 Minute.
- ii. Complete a minimum 3:00 minutes static apnea without any hypoxic signs or symptoms.
- iii. As a safety, student must complete:
 - 1. Buddy supervision.
 - 2. Monitor timing.
 - 3. Perform safety signals.
 - 4. Recovery breathing and support assistance.
- 5. Dynamic apnea (optional).
 - a. As a breath-holder student must complete a minimum of 3 dynamic performances:
 - i. Vent distance ratio:
 - 1. 1 minute 25 minutes.
 - 2. 2 minutes 25 minutes + turn.
 - 3. 2 minutes- 50 minutes.
 - b. Streamlining and kicks appropriate for dynamic.
 - c. Complete a minimum 50 metre/164 Feet dynamic apnea without any hypoxic symptoms.
 - d. As a safety student must complete:
 - i. Surface safety with floatation.
 - ii. Recovery breathing and surface support assistance.
- 6. Negative Pressure Dives:
 - a. Students work as Buddy A and Buddy B, switching back and forth after each dive.
 - b. Students must complete a maximum of 6 negative pressure dives:
 - i. 1 2: first level exhalation; mouth fill and Frenzel mouth fill out of mask through nose
 - ii. 3 4: second level exhalation, focus on head position, practice mouth fills on bottom.

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- iii. 5 6: third level exhalation with mouth fill, focus on head position, relaxation and air management.
- c. Complete at minimum, first level exhalation with proper equalization at minimum depth of 3 metre/10 Feet, or second level exhalation with proper equalization for pools shallower than 3 metre /10 Feet.
- d. Complete all dives as follows:
 - i. Employ surface pre-equalizations; $\frac{1}{2}$ way down and once on bottom.
 - ii. Hand over head for protection holding mask in place.
 - iii. Head down vertical position during sink and while on bottom (exception dive #6 where students may take heart rate relaxed on bottom).
 - iv. Preform recovery breathing.
- e. As Safety, provide supervision and assistance with recovery breathing.

6.13 Open Water

To be certified as a PFI Intermediate Freediver a student must demonstrate the following skills to the satisfaction of the PFI Instructor as follows:

- 1. Open Water Training Sessions:
 - a. A minimum of two (2) separate ocean sessions must be completed with three (3) recommended.
- 2. Weighting and Buoyancy:
 - a. Establish positive buoyancy at approximately 5 metre/16 Feet after a 1st level exhalation without sculling, finning, treading, or pushing off plate.
 - b. Establish neutral buoyancy at approximately 10 metre/33 Feet without sculling, finning, treading, or pushing off plate.
- 3. Fin Use:
 - a. Demonstrate proper kick cycles determinations to landmark depths:
 - i. Landmark 10 metre/33 Feet kick cycles count.
 - ii. Landmark 15 metre/50 Feet kick cycles count.
 - iii. Landmark 20 metre/66 Feet kick cycles count.
 - iv. Landmark 25 metre/82 Feet kick cycles count.
- 4. Free Immersion Warm-up Dives:
 - a. Eight free immersion warm-up dives.

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- b. Complete a minimum of eight (8) free immersion style freedives as a warm-up.
- c. Must reach a minimum of 25 metre/82 Feet without any hypoxic symptoms or barotraumas.
- d. Employing the following proper techniques described below:
 - i. Breathe up properly.
 - ii. Remove snorkel.
 - iii. Descend using double or single leg descents.
 - iv. Ensure proper head position.
- e. Facial immersion for 5 minutes may be introduced on open water session 2.
- f. A negative pressure dive with 1st level exhalation to a max 10 metre /33 Feet with 'touch 'n go' may be introduced as last warm-up procedure on open water session 2.
- 5. Constant Ballast Target Dives:
 - a. Complete a minimum of eight (8) constant ballast style freedives.
 - b. Reach a minimum depth of 25 metre/82 Feet without hypoxic symptoms or barotraumas.
 - c. Employ the following proper techniques described below:
 - i. Surface breathing and preparation.
 - ii. Remove snorkel.
 - iii. Single leg raised descent.
 - iv. Proper head position.
 - v. Proper kick cycles to 20 Metre/66 Feet.
 - d. Pause kicking and sink to target depth with intermittent maintenance kicks to keep descent rate.
- 6. Emergency Rescue & Problem Management:
 - a. Assist with a simulated surface LMC as a safety for a simulated 25 metre/82 Feet dive:
 - i. Meet Freediver at proper safety depth of 10 metre/33 Feet.
 - ii. Signal and respond to Freediver's signs and issues.
 - iii. Physically support the Freediver.
 - iv. Keep one hand on the chest above the waterline but below the chin.

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- v. Speak calmly to encourage the Freediver to breathe.
- b. Respond to a simulated blackout at the surface for a simulated 30 metre/98 Feet dive:
 - i. Meet Freediver at proper safety depth of 10 metre/33 Feet.
 - ii. Signal and respond to Freediver's signs and issues.
 - iii. Protect the Freediver's airway with a "head sandwich".
 - iv. Place the Freediver on their back into a "dosey-doe".
 - v. Remove mask.
 - vi. Blow, Tap, Talk 3 times.
- c. Assist with a simulated underwater blackout for a simulated 40 metre/132 Feet dive:
 - i. Meet Freediver at proper safety depth of 15 Metre/50 Feet.
 - ii. Signal and respond to Freediver's signs and issues.
 - iii. When Freediver blacks out, protect the airway with a "head sandwich".
 - iv. Swim Freediver to the surface and place on back and into "dosey-doe" position.
 - v. Remove mask and perform Blow, Tap, Talk 3 times.
 - vi. Perform 2 simulated rescue breaths and call for assistance.
 - vii. Begin to evacuate while performing simulated rescue breaths once every 5 seconds.

6.14 Graduation Requirements

In order to successfully complete the course students must:

- 1. Successfully complete all the knowledge development, confined water, and open water training sessions. Open water training is not necessary for Pool Only certification.
- 2. Demonstrate mature and sound judgment concerning planning and execution.
- 3. Achieve a passing score of 80% on the final exam and show 100% knowledge comprehension.
- 4. Complete the following skills:
 - a. Equipment:
 - i. Prepare equipment with minimal assistance.

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- ii. Buddy check all equipment.
- b. Entry and exit:
 - i. Enter water with techniques appropriate for the environment.
 - ii. Signal buddy/shore/boat.
 - iii. Exit water with techniques appropriate for the environment.
- c. Proper weighting and buoyancy:
 - i. Test for approximate neutral buoyancy at surface by floating upright at collar bone without sculling, finning, or treading.
 - ii. After buoyancy has been established either collarbone for pool only, or 10 metre/33 Feet during open water for Intermediate Freediver, perform a first level exhalation at the surface - If the student sinks – they are over weighted.
- d. Snorkel Use:
 - i. Successfully clear and blast the snorkel without removing the head from the water.
- e. Proper fin use:
 - i. Flutter kick at the surface.
 - ii. Maintain a stationary position with sculling.
- f. Descent and Ascent Procedures:
 - i. Surface breathing and preparation.
 - ii. Remove snorkel prior to entry.
 - iii. Demonstrate a double leg raised entry or a single leg raised entry in the order of:
 - 1. Bend.
 - 2. Leg(s).
 - 3. Pull.
 - 4. Kick.
 - iv. Demonstrate proper ascent procedures:
 - 1. Head in neutral position.
 - 2. Recapturing expanding air in the mask if possible.
 - 3. Exhale at approximately 2 metre /7 Feet.

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- 4. Proper recovery breathing.
- v. During descents and ascents the student's head position must remain neutral.
- g. Self-emergency Ascent Procedures:
 - i. Flooded mask ascent:
 - 1. Fully flood at depth:
 - a. Pool only deep end of pool.
 - b. Intermediate Freediver at 10 metre/33 Feet.
 - 2. Remain at depth for approximately 10 seconds before ascending.
 - 3. Ascent and recovery breathe in a controlled manner.
 - ii. Remove weight belt and ascend:
 - 1. Remove weight belt at depth:
 - a. Pool only deep end of pool.
 - b. Intermediate Freediver minimum 10 metre/33 Feet.
 - 2. Ascend holding belt low at their side with buckle end down.
 - 3. Perform proper recovery breathing.
 - 4. Replace weight belt at the surface with right hand release.
- h. Recovery Breathing:
 - i. Proper exhalation from 2 metre/6 Feet.
 - ii. Position both hands on float/side of pool.
 - iii. Show proper 3 hook and 3 cleansing breaths on upper half of lung volume.
 - iv. Hook breaths are held for a full 3 seconds.
- i. Safety & Problem Management:
 - i. Assist with recovery breathing as a safety:
 - 1. Be 2 metre/7 Feet to 3 metre/10 Feet to the side of the Freediver.
 - 2. Use audio coaching when necessary.
 - 3. Remain attentive and vigilant for a minimum of 30 seconds after the Freediver has surfaced.
 - ii. Respond to a simulated surface LMC as a Safety:
 - 1. Physically support the Freediver.

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- 2. Keep one hand parallel to the water, above the water, but below the chin.
- 3. Speak calmly to encourage the Freediver to breathe.
- 4. Maintain control until the Freediver regains control.
- iii. Respond to a simulated blackout at the surface:
 - 1. Place the Freediver on their back with the airway protected using a "head sandwich".
 - 2. Securely support the Freediver's head with a "dosey-doe".
 - 3. Blow, tap, talk 3 times.
 - 4. Maintain control until the Freediver regains control.
- iv. Assist with a simulated underwater blackout:
 - 1. Recognize signal for assistance.
 - 2. Physically support the Freediver.
 - 3. Ensure proper hand placement.
 - 4. Recognize blackout before the surface.
 - 5. Protect the airway with a "head sandwich".
 - 6. Perform surface blackout procedures through 2 rescue breaths once the student has ascended with the blacked out Freediver.
- v. Lost Freediver completed no deeper than 10 metre/33 Feet:
 - 1. Surface swim minimum 25 metre/82 Feet looking for "lost" Freediver.
 - 2. Locate Freediver, catch breath, breathe up.
 - 3. Make proper entry and simulate 25 metre/82 Feet dive.
 - 4. "Victim" descends after rescuer has been under water for approximately 20 seconds and will lay on the bottom next to the "rescuer".
 - 5. After completion of 25 metre/82 Feet descent simulation, rescuer secures victim's airway with a "head sandwich".
 - 6. Ascend to the surface and place victim into "dosey-doe" and perform surface blackout rescue procedures.
 - 7. Call for assistance and evacuate the victim 50 metre /165 Feet while simulating rescue breaths every 5 seconds.

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Part 2: Diver Standards

Instructors must:

1. Submit certifications to PFI Headquarters within 7 days of course completion date for processing.

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