

## 7. Safety Freediver

### 7.1 Introduction

The PFI Safety Freediver course is a recreational level program where successful participants will learn the knowledge, skills and techniques for advanced level safety that may be used in demanding freediving environments, Advanced level depths of freediving, and competition style freediving for depths beyond 40m/132ft.

### 7.2 Course Objectives

The objective of this course is to train individuals in the benefits, skills, techniques and safety & problem management for advanced level and competition style safety. Safety Freediver focuses on safety and problem management as well as risk mitigation with an emphasis on counter-balance set-up and use. It also incorporates primary and secondary safety freedivers for accident management.

### 7.3 Program Prerequisites

1. 16 years of age
2. Above average swimming skills
3. PFI Intermediate Freediver, or equivalent from another recognized agency that have also completed the PFI Intermediate Freediver Crossover Exam
4. Be an active status CPR, first aid and AED provider with a program that include marine life injuries and neurological assessments\*
5. Be certified to administer O2 for dive related injuries\*

\* These programs can be taught concurrently with Safety Freediver.

### 7.4 Required Student Equipment

1. Freediving quality mask, fins, snorkel
2. Freediving quality exposure protection (appropriate for local environment)
3. Freediving quality waist and neck weight belt and weights (appropriate for local environment)
4. Freediving computer and additional timing device

## 7.5 Support Materials

### Student materials:

1. *PFI Medical Statement*
2. *PFI Liability and Assumption of Risk form*
3. *PFI Safety Freediver Slides*

### Instructor materials:

1. *PFI Safety Freediver Presentation*
2. *PFI Safety Freediver final exam and answer sheet*
3. *AIDA sanctioned freediving lanyard*

## 7.6 Qualification of Graduates

1. Upon successful completion of this course, graduates may engage in safety freediving activities as a safety during advanced level training for depths up to and exceeding 60m/197ft.
2. Students will be able to perform each position of a freedive safety team.
3. Upon successful completion of this course, graduates are qualified to enroll in Advanced Freediver, Freediver Supervisor, Open-line Diving, and Specialty Freediver programs.
4. Divers may be certified with a Safety 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.

## 7.7 Who May Teach

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

## 7.8 Student to Instructor Ratio

### Classroom

1. Unlimited so long as adequate facility, 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). Or 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). Or 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

## 7.9 Depth Restrictions

### Open Water

1. Maximum open water depth of 40 meters/132 feet.

### Confined Water

1. Maximum confined water depth of 10 meters/33 feet

## 7.10 Recommended Course Minimums:

### Classroom time

1. 4.0 hours

### Confined Water time

1. 5.0 hours

### Open Water Time

1. 6.0 hours

## 7.11 Knowledge Development Overview

The following topics must be covered during the course. Instructors may use additional texts or materials they feel help present these topics

1. Introduction
  - a. Participant and staff Introductions
  - b. Course overview
  - c. Paperwork and prerequisites
  - d. Equipment requirements check
  - e. Classroom, confined and open water protocols and conduct
  - f. Safety / supervision practices
2. Roles as Safety Freediver
  - a. Safety Freediver Responsibilities:
    - i. Role model
    - ii. Directly responsible for the safety of the performing freediver
    - iii. Areas of responsibility: comp line, warm-up lines, transition zones, spectator area
    - iv. Safety team: primary, secondary, on deck, clutch, timer, first aid
    - v. First aid and freediver retrieval systems setup
  - b. Safety Freediver in Training
    - i. Training is any individual or group meeting to work on techniques and achieve greater depths within their certification levels outside of formal training under the supervision of a PFI Professional Member.
    - ii. Assist with the group in setting up the training area whether confined or open water
    - iii. Set up safety equipment including first aid, emergency oxygen, in-water freediving recovery oxygen, and the open water freediver retrieval system.
    - iv. Note that a Safety Freediver is an advanced safety that is trained to handle many situations – however not eligible for liability insurance and cannot be part of any organized event, or educational program
3. Advanced Safety & Problem Management
  - a. Advanced Depth Safety Protocols, Systems and Teams:
    - i. These recommendations are for training dives outside of class or competitions
    - ii. All competition dives require a lanyard and FRS regardless of depth
    - iii. 0-20m: 2-person freedive team. At depth safety may be required.
    - iv. 21-40m: 3-person freedive team recommended and at depth safety.
    - v. 41m – 60m: 4-person freedive team, two at depth safety, 'Freediver Retrieval System' (FRS) and lanyards mandatory

- vi. 61m – 80m: 5-person freedive team, three at depth safety, counterbalance and lanyards mandatory
- vii. 81m+: 6 person+ freedive team, multiple at depth which may include scuba support, counterbalance and lanyards mandatory
- b. Individual Team Member Roles:
  - i. Individual team roles provide the following:
    1. Appropriate level of safety for the performance
    2. Back-up / redundancy
    3. Emergency signals for depth to surface
    4. Efficient activation and use of counterbalances
    5. Adequate rest periods for team members
    6. Each role may have dual purposes
      - a. Primary Safety Freediver
        - i. 1/3 Depth and dive time + 10 seconds
        - ii. Responds to and signals emergency / bailout
        - iii. Protects airway
        - iv. Provides BLS until requests change
        - v. May request position change at depth
      - b. Secondary Safety Freediver
        - i. 5m/16' shallower and 10 seconds later than Primary
        - ii. May provide downtime count
        - iii. Provides support and propulsion
        - iv. Removes lanyard at surface
        - v. Provides surface propulsion, support, and BLS if requested
        - vi. May take primary position at depth if signaled
        - vii. Responds to and signals emergency / bailout
      - c. Scooter Safety Freediver
        - i. 2/3 depth + 10 seconds
        - ii. Responds to and signals emergency / bailout
        - iii. Provides support and propulsion
        - iv. Responds to performer
        - v. Slows or hands off to primary and secondary at shallower depths
        - vi. Safety Freedivers using scooters should be PFI DPV Freediver certified

- d. On-Deck / Primary stand-by
  - i. Rotates into primary position next
  - ii. May provide countdown & downtime
  - iii. May work clutches and counterbalance
  - iv. May take secondary position if primary surfaces
  - v. Responds to and signals emergency / bailout
- e. On-Deck / Secondary stand-by
  - i. Rotates into secondary position next
  - ii. May provide countdown & downtime
  - iii. May work clutches and counterbalance
  - iv. Responds to and signals emergency / bailout
- f. Scuba Safety
  - i. Used to provide 'eyes on' and immediate emergency signal to surface at depths below 80m
  - ii. Responds to and signals emergency / bailout
  - iii. May also have an FRS (lift bag and bottle w/ carabiner or line ascender)
    - 1. Scuba Safety Divers need to be trained and qualified to the depth they are performing as safety and additionally need to be trained and certified as TDI Scuba Freedive Safety
- g. Clutch (person responsible at surface for the counter-balance operations)
  - i. Responds to and signals emergency / bailout
  - ii. Works the clutch/cleat and/or drop-weight
  - iii. Provides additional 'pulling power'
  - iv. May also support performer during surface breath-up
  - v. May also provide count-down and count-up
- c. Line Freediving Operating Procedures:
  - i. Pre-Dive:
    - 1. Agree on objectives for the day; team, locations, depths, equipment
    - 2. Develop 'Emergency Assistance Plan'
    - 3. Assemble and assign team and performer rotations along with personal equip check
    - 4. Prep and check rig and safety / first aid equipment
    - 5. Review safety procedures and provide 'dry-runs'
    - 6. Set-up equipment at training site and do rig / safety equipment check

- ii. Dive:
    - 1. Confirm performer, style, depth, anticipated time and countdown time
    - 2. Establish rotations and jobs
    - 3. Dive check between primary/secondary:
    - 4. Initiate count-down and count-up
      - a. Count-down; 2min standard count-down till performer dives
      - b. Count-up; after performer starts in +10sec
    - 5. Safety freedive team performs according to training and protocol:
      - a. Good performance; conduct performer post-dive evaluation
      - b. Performer requests bailout; conduct performer post-dive performance evaluation
      - c. Performer requires emergency bail-out (LMC, BO):
        - i. Initiate emergency response u/w
        - ii. Initiate any surface emergency response
    - 6. Surface safety check to check all team members are OK and move to 2nd performer starting back at the top 'Confirm performer, style, depth, anticipated time and countdown time'
  - iii. Post-Dive:
  - d. Breakdown, rinse and store rig and safety equipment checking for damage
  - e. Debrief the team training session; objectives for the day, team, locations, depths, equipment, performances, and any rescues
4. Counterbalance & Freediver Retrieval Systems:
- a. History and concepts of freediver retrieval systems and counterbalances
    - i. Freediver Retrieval System (FRS) is any system that allows the performing freediver to be independently and immediately retrieved from depth while wearing a lanyard, from max depth to the surface with minimal effort and at a speed equal to or greater than the freediver would typically swim (1m/s)
    - ii. FRS' should have two systems; primary FRS and back-up

- iii. FRS's included:
  - 1. Counterbalances
  - 2. Float and line pulled from surface by surface tenders or mechanical engines
  - 3. Scuba divers with lift-bags
  - 4. Other systems may exist that follow the criteria set above
- iv. Counter-balance concept
  - 1. Retrieve a freediver from depth when lanyard is used
  - 2. Safety activated from the surface
  - 3. Safeties at depth can signal surface to activate system
  - 4. Balanced or over-balanced
- v. Counter-balance parts and pieces
  - 1. PVC, aluminum, carbon fiber bars just below surface keep floats and lines apart
  - 2. Floats – at end of each bar
  - 3. Lines
  - 4. Bottom weights
  - 5. Bottom plate
  - 6. Configurations
  - 7. Use and operation of counterbalance
- b. Lanyards parts, pieces and use
  - i. Wrist / waist / ankle strap, line or cable, quick release with D-ring and carabiner
  - ii. Waist belt is separate of the weight belt
  - iii. Cable is typically 1m (shorter or longer)
  - iv. Carbineer; aluminum and composite will follow, stainless steel leads during sink phase
  - v. AIDA rules govern lanyard specifications for competitions
- 5. Emergency Signals:
  - a. Surface to Shore/Boat
    - i. Hand Signals
    - ii. Sound Signal :
  - b. U/W Diver to Diver or surface
    - i. Hand Signals
    - ii. Sound Signal:



6. Advance Weighting Precautions:
  - a. Advanced freedivers may be neutrally buoyant at 15m/50' or deeper on a peak inhalation plus packing
  - b. Due to packing, the freediver may be negatively buoyant at the surface on an exhalation
  - c. This is one reason we use freediver recovery systems with lanyards
  - d. Since freedivers will be warming up while weighted for their dive, extra supervision must always be maintained, including use of a lanyard
7. Common Freediver Problems and Responses
  - a. Post-Freedive Performance Evaluation Criteria or Bailout:
    - i. Oxygen, energy, equalizing, legs, urge to breathe, psychology, equipment, chest compression, technique, own it
  - b. Common Physiological Problems:
    - i. Stress and anxiety, hypoxia, LMC, recovery breathing, 6 types of blackout, CO2 accumulation
  - c. Recovery Breathing Problems:
    - i. Improper volume
    - ii. No hook breaths from depth
    - iii. Not holding hook breaths long enough
    - iv. Not enough breaths
  - d. Common Equipment Problems:
    - i. Masks & Facial Equipment
    - ii. Snorkel
    - iii. Fins
    - iv. Wetsuits & Exposure Protection
    - v. Weight Systems
    - vi. Computers
    - vii. Lanyards:
      1. Wrist / waist / ankle (appropriate for discipline)
      2. Hang-up on surface and/or depth (line is stored coiled or with kinks, lack of proper start or bottom turn)
      3. Quick release doesn't function (lack of adequate freshwater rinse, secure pull-tap)
      4. Strap holding (Velcro is worn)
    - viii. Counterbalances and Rig Systems:
    - ix. Lift Bag Retrieval Systems:
  - e. Depth Specific Problems:
    - i. Blackout at depth / surface
    - ii. LMC at surface

- iii. Whiteout
- iv. Equalizing; ears / sinuses
- v. Chest or tracheal squeeze
- vi. Pressure contractions
- vii. Lanyard catching and slowing pace
- viii. Loss of line / reference
- ix. Too fast / too slow
- x. Bail out
- f. Static Apnea Problems:
  - i. Improper signals
  - ii. Near Blackout (LMC)
  - iii. Blackout
  - iv. Loss of airway control
  - v. Strong contractions
  - vi. Unresponsive
  - vii. Recovery breathing
  - viii. Edge of pool to close
- g. Dynamic Apnea Problems:
  - i. Near Blackout (LMC)
  - ii. Blackout
  - iii. Loss of airway control (bubbles)
  - iv. Strong contractions
  - v. Speeding up / slowing down
  - vi. Cramps & lactic acid
  - vii. Losing technique and kick style
  - viii. Disorientation / lane reference
  - ix. Recovery breathing
  - x. Weighting
- 8. Barotraumas – Pressure Related Injuries
  - a. Middle ear barotraumas – during a continuous fast descent without equalization
  - b. Barotitis media
  - c. Sinus squeeze
  - d. Alternobaric vertigo
  - e. Transient vertigo
  - f. Perforated tympanic membrane (TM)
  - g. Tooth squeeze
  - h. Reverse block
  - i. Mask squeeze
  - j. Lung over-pressurization
  - k. Lung/tracheal squeeze

9. Decompression Illness (DCI) and Technical Freediving
  - a. Decompression Illness and Freediving:
    - i. Decompression sickness – excessive accumulation and release of nitrogen from body tissues
      1. Bubbles form causing;
      2. Surface intervals to avoid DCI
  - b. Technical Freediving:
    - i. 100% Oxygen can be used as a recovery agent for Advanced Freediving
    - ii. Freedivers cannot breathe 100% O<sub>2</sub> and dive immediately for risk of oxygen toxicity
    - iii. Effects of varying partial pressures on a person breathing 100% oxygen –
      1. CNS oxygen toxicity – NOAA CNS oxygen exposure limit
        - a. Freedivers at increased risk because of CO<sub>2</sub> retention work fatigue as well as potentially reduced Gamma Aminobutyric Acid (GABA) a brain wave modulator
    - iv. Signs & Symptoms of Oxygen Toxicity (CONVENTID)
      1. CONvulsions
      2. Visual disturbances
      3. Ear ringing
      4. Nausea
      5. Tingling
      6. Irritability
      7. Dizziness
  - c. Basic O<sub>2</sub> Rules and Protocols
    - i. 5min O<sub>2</sub> flush (recommended after for depths deeper than 40m/132ft)
    - ii. Surface O<sub>2</sub> only (compressed gas / lung expansion issues)
      1. 5 min off O<sub>2</sub> (breath normal air before any further freediving)
  - d. Safety Note:
    - i. Unless trained and certified in the use of compressed oxygen and nitrox Safety Freedivers can only monitor the Basic O<sub>2</sub> Rules and Protocols set above. They cannot assemble or breakdown Technical scuba systems for use or use Technical systems for any reason other 5min O<sub>2</sub> flush

10. Safety Freediver Equipment Workshop

- a. First Aid & O2 Assembly Workshop:
  - i. First aid, emergency O2, and technical freediving O2 assembly set-up and check for use
- b. Counterbalances Assembly Workshop:
  - i. Hands on workshop to assemble and review all parts of an FRS
- c. Lanyard Assembly Workshop:
  - i. Check to ensure lanyard compliance for safe operation
  - ii. Demonstrate proper lanyard location for each discipline
  - iii. Activate emergency release

## 7.12 Confined Water

To be certified as a PFI Safety Freediver students must demonstrate the following skills to the satisfaction of the PFI Instructor:

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 metres non-stop using any stroke without the use of swimming aids (mask or swim goggles may be used), **or** 300 metres nonstop using mask, snorkel, and fins
  - b. Tread water for 10 minutes without floatation

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

2. Static Apnea Mockup
  - a. Class is split into two groups – safety and performer
  - b. Safety group will react to issues provided to the performer group
  - c. Perform a series of at least 4 static mockups where the instructor gives those performing the statics realistic problems that are commonly seen
  - d. Safety will respond with appropriate levels of correction
    - i. “give me a signal” “give me a stronger signal” “don’t hold your signal”
    - ii. Telling the performer to relax appropriate areas that are showing tension
    - iii. Perform appropriate rescues as previously taught
  - e. Last static will always end in a full blackout with at least two rescue breaths

3. Dynamic Apnea Mockup
  - a. The Instructor will split the class into two groups – safety and performer
  - b. Perform a series of at least 4 dynamic mockups where the instructor gives those performing the dynamic realistic problems that are commonly seen in dynamic scenarios
  - c. Last dynamic will always end in a full blackout on the bottom, with rescuer pulling the freediver off the bottom, rotating under the freediver so that the freediver surfaces face up, perform blackout procedures to at least two rescue breaths
4. Lifeguard Skills:
  - a. Talk and encourage the person in all situations
    - i. Drop your belt
    - ii. Lay on your back
    - iii. Come to me
5. Surface/Deck Response
  - a. Establish low and anchored body positioning
  - b. Use shepherd's hook, throw buoy, reach assist
  - c. Continuous talk and encouragement
  - d. Demonstrate for active and passive panic
6. Tired Diver Tow
  - a. Arm hook / dosey-doe tow
    - i. Ready to give breaths if necessary
  - b. Arm pull
  - c. Leg push
7. In-Water Response: Passive & Responsive
  - a. Swim approach with float
  - b. On guard body positioning
  - c. Maintain 3m/6' distance
8. In-Water Response: Passive & Unresponsive
  - a. Swim approach with float
  - b. On guard body positioning
  - c. Swim around behind tired diver when approaching
9. In-Water Response: Active & Responsive
  - a. Swim approach from behind with float
  - b. On guard body positioning
  - c. Approach and remove weight-belt underwater

10. In-Water Response: Active & Unresponsive
  - a. Swim approach from behind with float
  - b. On guard body positioning
  - c. Approach and remove weight belt underwater
11. Front Approach: Breaks & Release
  - a. Face to face approach and panic attack
  - b. Freediver Supervisor tuck chin, secure under armpits, push victim vertical and behind Freediver Supervisor
    - i. Freediver Supervisor swims away underwater maintaining 3m distance and on guard stance
12. Back Approach: Breaks & Release
  - a. Back to face approach and panic attack
  - b. Freediver Supervisor tuck chin, secure under armpits, push victim vertical and forward of Freediver Supervisor
    - i. Freediver Supervisor swims away underwater maintaining 3m distance and on guard stance
13. Unconscious Freediver Exits
  - a. One-person ladder exit
  - b. Two-person deck exit

## 7.13 Open Water

The following open water skills are to be briefed, evaluated, practiced, and debriefed by the PFI Instructor and/or PFI Assistant Instructor as outlined in the General Standards and Procedures section.

- During all warmups, and during appropriate skills, all students will act in a buddy team, surface safety and breath holder.

To be certified as a PFI Safety Supervisor 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 one ocean session must be completed
2. Equipment
  - a. Prepare without assistance of the instructor
  - b. Buddy check all equipment
  - c. Entry Procedure most appropriate for local environment

3. Recovery Breathing and Coaching
  - a. Buddy A – recovering freediver
    - i. Proper upper lung exhalation in last 2m/6ft
    - ii. Position both hands on float
    - iii. Show proper 3 hook and 3 cleans breaths on the upper half of lung volume
    - iv. Holding a full 3sec count during Hook breaths
    - v. Employ surface protocols
    - vi. Signal OK when asked by surface safety after 30sec
  - b. Buddy B – surface safety
    - i. Position 90 degrees to surfacing freediver
    - ii. Providing visual and audio counts during recovery breathing
    - iii. Use ‘float’ hand for counts
    - iv. Coaching a full 3sec count during Hook breaths and count off cleansing breaths
    - v. Signaling OK after 30sec on surface
4. Safety Scenarios

***All students must successfully participate in all positions of a safety team, including participating the rotating to depth relieving the primary, or secondary, as well as having pulled up a blacked-out freediver utilizing the FRS.***

  - a. 30m – 39m Recreational Scenario Assistance with LMC
    - i. PFI Instructor simulates 40m/132ft freedive with 20-30 seconds of bottom time, Simulating a recreational dive
      1. Completes dive
      2. Has LMC after 3rd hook breath
    - ii. Primary Safety Freediver – 15m/50ft
      1. Primary meets at 15m/50ft
      2. Proper position 45-degrees from diver
      3. Provides support for LMC - recreational
    - iii. Secondary Safety Freediver – 10m/33ft
      1. Secondary meets at 10m/33ft
      2. Proper position opposite Primary Safety behind freediver
  - b. 40m - 49m Competition Scenario Assistance with LMC
    - i. PFI Instructor simulates 50m/165ft freedive
      1. Reaches safety depth late (too slow on dive)
      2. Asks for assistance (before reaching safety if desired)
      3. Has LMC after 3rd hook breath

- ii. Primary Safety Freediver – 20m/66ft – Secondary Safety Freediver – 15m/50ft
  1. Recognize and responds to ‘somethings wrong’ signal by 15m/50ft
  2. Provide lift assistance during ascent
  3. Provides proper LMC support for disqualified diver (diver asked for assistance)
- iii. Secondary Safety Freediver – 15m/50ft
  1. Recognize and responds to ‘somethings wrong’ signal at 15m/50ft
  2. Provide lift assistance during ascent
  3. Provides proper LMC support for disqualified diver (diver asked for assistance)
- iv. Clutch
  1. Count down timer plus diver time
  2. If Primary or Secondary calls the dive
    - a. Call out “EMERGENCY, EMERGENCY, EMERGENCY”
    - b. Activate FRS
    - c. Place foot against carabiner under float
    - d. Pull plate to surface as fast as possible
- c. 50m – 59m Competition Scenario with B/O
  - i. PFI Instructor simulates 55m/180ft freedive
    1. Reach safety depth early
    2. Ask for assistance (before reaching safety if desired)
    3. BO by 10m/33ft
    4. Come around after 3 ‘BLOW, TAP, TALKS’ and 2 full breaths
  - ii. Primary Safety Freediver – 20m/66ft – Secondary Safety Freediver – 15m/50ft
    1. Recognize and respond to ‘somethings wrong’ signal at 15m/50ft
    2. Provide lift assistance during ascent
    3. Recognize blackout 10m/33ft below surface
    4. Airway control ‘head sandwich’ to horizontal
    5. Switch arms into the ‘Dosey Doe’ position
    6. Remove mask and provide 3 ‘BLOW, TAP, TALKS’ and 2 full breaths, initiate help, and continue rescue breaths for at least 2 rounds of breaths



- iii. Secondary Safety Freediver – 15m/50ft
  1. Recognize and respond to ‘somethings wrong’ signal at 15m/50ft
  2. Provide lift assistance during ascent
  3. Removes lanyard from line
  4. Immediately assists with ‘Dosey Doe’
- iv. Clutch
  1. Count down timer plus diver time
  2. If Primary or Secondary calls the dive
    - a. Calls out “EMERGENCY, EMERGENCY, EMERGENCY”
    - b. Activates FRS
    - c. Places foot against carabiner under float
    - d. Pulls plate to surface as fast as possible
- d. 60m Competition Scenario Blackout at Depth
  - i. PFI Instructor simulates 60m/197ft freedive
    1. Blackout at depth
    2. Allows plate to catch lanyard and bring to safeties at 15m/50ft
  - ii. Primary Safety Freediver – 20m/66ft
    1. Calls dive at the 1:50 mark on freedive
    2. Calls for switch
    3. Ascends to surface
    4. Breathes up to make additional dives
  - iii. Secondary Safety Freediver – 15m/50ft
    1. Repeats primary’s call of dive
    2. Waits for Primary On-Deck to relieve at 15m/50’
    3. Ascends to surface
    4. Breathes up to make additional dives
  - iv. On-Deck Primary – On-Deck Secondary
    1. Manages freediver’s position prior to the dive, and secures pillow/float after freediver’s entry
    2. Recognizes called dive
    3. Descends to 15m/50ft to relieve Safety at depth
    4. Ascends when relieved by another diver
    5. Breathes up to make additional dives

- v. Clutch
    1. Count down timer
    2. Calls out “EMERGENCY, EMERGENCY, EMERGENCY” when primary and secondary call dive
    3. Activates FRS
    4. Places foot against carabiner under float
    5. Pulls plate to surface as fast as possible
  - vi. Safety at depth when freediver arrives at 15m/50’
    1. Immediately protects airway ‘head sandwich’
    2. Ascends to surface, then horizontal on to back
    3. 3 – blow-tap-talks, two rescue breaths
    4. Calls for help
    5. Continue rescue breathing while swimming around rig
  - vii. Safety swimming down to relieve diver at depth when freediver/plate reaches 15m/50’
    1. Assists with ascent
    2. Removes lanyard from line
    3. Gets into “Dosey Doe” position on opposite side of primary
    4. Assists with swimming around rig
    5. Waits for primary to call to switch rescue breathing
5. Maximum Safety Threshold Dive (optional)
- a. Primary Safety Freediver – 25m/82ft to 40m/132ft
    - i. Makes dive to next 5m/16ft safety depth
    - ii. Waits 20 seconds
    - iii. Calls dive
    - iv. Protects airway with “head sandwich”
    - v. Swims blacked-out diver to the surface, performs surface blackout protocols until at least one additional rescue breath after calling for help
  - b. Secondary Safety Freediver
    - i. Follows Primary down per protocols, 10 seconds after, 5m/16ft shallower
    - ii. Secondary will act as the Safety for the Primary as this is a working threshold dive for the Primary

## 7.14 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 whole knowledge comprehension.

### Instructors must:

1. Process the registration within 7 days of course completion