

Diver Course

Los Angeles County Sheriff's Department

Public Safety Diver Course

1820-23131

EXPANDED COURSE OUTLINE

Instructors/Coordinators: Deputy James Harrell, Deputy Tracy River, Deputy Chris Young, LASD (323) 264-7084

I. Course Introduction:

A. Instructor/Student expectations.

1. This module of instruction is intended to introduce the students to the teaching methodology and background for the course. The daily routine and logistic requirements are established as well as individual responsibilities during the course
2. Safety is emphasized as the number one priority.
3. Documentation is checked to ensure all students are certified basic SCUBA divers.

II. Introduction to Public Safety Diving:

A. Basic Scuba Theory.

1. This module of instruction provides a broad background of operating in an underwater environment
2. A history of dive tables and SCUBA equipment and operation will be presented.
3. Swimming skills, buoyancy control, mask clearing, buddy breathing, ditch and recovery, high dive entries will be taught and demonstrated.
4. Underwater evidence recovery will be

taught.

B. Practical Application:

1. Pool test

- 400 yard swim
- 50 yards weighted swim
- 25 yard underwater swim
- weight recovery free dive
- 10 minute treading water

III. Diving skills in a pool environment:

A. This module of instruction provides practical application diving in a pool environment designed to increase the students basic diving skills.

1. Buoyancy Control - Students will learn and practice maintaining their buoyancy at varying depths.
2. Mask clearing - Students will learn and practice techniques to be used in the event of mask flooding or fogging.
3. Buddy breathing - Students will learn and practice techniques used to accept air from another diver if their air supply ceases and to

give air to another diver who has an air supply failure.

4. Ditch and recovery - Students will learn and practice techniques used to release tangled gear and to recover lost or released gear.
5. High dive entries - Students will be taught and practice entering the pool from heights while maintaining control and proper operation of all of their equipment.
6. Full face mask orientation - Students will be taught and practice the use of a full face mask to

include flooding and clearing, removing and replacing and switching to a back up regulator and mask.

IV. Diving skills in a pond environment:

A. This module of instruction provides practical application diving in a pond environment designed to increase the students basic diving skills.

1. Class encompasses all aspects of diving in a pond environment to include hazards and limited visibility not experienced in a pool environment.
2. Emphasis is on the proper management and use of SCUBA equipment in a pond environment.
3. Students will be taught and practice evidence search techniques.

4. Buoyancy Control - Students will learn and practice maintaining their buoyancy at varying depths.

5. Mask clearing - Students will learn and practice techniques to be used in the event of mask flooding or fogging.

6. Buddy breathing - Students will learn and practice techniques used to accept air from another diver if their air supply ceases and to give air to another diver who has an air supply failure.

7. Ditch and recovery - Students will learn and practice techniques used to release tangled gear and to recover lost or released gear.

8. High dive entries - Students will be taught and practice entering the pool from heights while maintaining control and proper operation of all of their equipment.

9. Full face mask orientation - Students will be taught and practice the use of a full face mask to include flooding and clearing, removing and replacing and switching to a back up regulator and mask.

V. Diving skills in a lake environment:

A. This module of instruction provides practical application diving in a lake environment designed to increase the students basic diving skills.

1. Class encompasses all aspects of diving in a lake environment to include hazards and limited visibility not experienced in other diving environments.

2. Emphasis is on the proper management and use of SCUBA equipment in a lake environment.

3. Students will be provided an overview of the proven search techniques for locating evidence underwater to include Fan Search/Circle Searches, Shore Tender responsibilities, Team responsibilities, Diver responsibilities, Effects of task loading on diver.

4. Buoyancy Control - Students will learn and practice maintaining their buoyancy in lakes at varying depths

5. Blackwater Diving - address dive safety issues while conducting black water dives to include Team concept approach, Safety considerations, Line pull signals: Diver to Tender and Tender to Diver, Defining roles: Primary diver, Safety diver, shore tender, assistant tender, paramedic divers, and Divemaster, Divemaster has overall responsibility of dive, Pre-dive briefing (what has to be covered), Proper documentation of each diver during dive operation, Task loading in zero visibility environment, Tethered diving and rescues, Past experiences/problems encountered.

6. Navigation Skills - Students will be taught and practice basic underwater navigation skills to include use of navigation board, use of console compass, Kick counts vs. timed runs and current considerations.

7. Lifting techniques in an underwater environment - Evidence raising.

8. Navigation and emergency drills conducted at shallow, medium and deep depths.

9. Mask clearing - Students will learn and practice techniques to be used in the event of mask flooding or fogging.

10. Buddy breathing - Students will learn and practice techniques used to accept air from another diver if their air supply ceases and to give air to another diver who has an air supply failure.

11. Ditch and recovery - Students will learn and practice techniques used to release tangled gear and to recover lost or released gear.
 12. High dive entries - Students will be taught and practice entering the pool from heights while maintaining control and proper operation of all of their equipment.

13. Full face mask orientation - Students will be taught and practice the use of a full face mask to include flooding and clearing, removing and replacing and switching to a back up regulator and mask.

VI. Introduction to Aqueduct Diving:

- A. This module of instruction will provide a broad overview on the proper equipment

and resources necessary to conduct dive operations in California aqueducts.

1. Dive Station Set-up (Equipment concerns)
2. Location
3. Security
4. Individual dive equipment needed for extended operations

5. Operations Plan
6. Aqueduct orientation

7. Submersed vehicle search and recovery techniques

VII Helicopter skills:

B. This module of instruction is designed to provide an overview of the proven techniques for deploying and recovering divers from the water.

2. Deployment techniques

3. Securing gear
4. Recovery techniques
5. Effects of rotor wash on divers

VIII. Diving skills in an ocean environment:

A. This module of instruction provides practical application diving in an ocean environment designed to increase the students basic diving skills.

1. Class encompasses all aspects of diving in an ocean environment to include hazards and limited visibility not experienced in other diving environments.
2. Emphasis is on the proper management and use of SCUBA equipment in an ocean environment.
3. Students will be provided an overview of the proven search techniques for locating evidence underwater to include Fan Search/Circle Searches, Shore Tender responsibilities, Team responsibilities, Diver responsibilities, Effects of task loading on diver.
4. Buoyancy Control - Students will learn and practice maintaining their buoyancy in lakes at varying depths
5. Blackwater Diving - address dive safety issues while conducting black water dives to include Team concept approach, Safety considerations, Line pull signals: Diver to Tender and Tender to Diver, Defining roles: Primary diver, Safety diver, 90% Diver, shore tender, assistant tender, paramedic divers, and Divemaster, Divemaster has overall responsibility of dive, Pre-dive briefing (what has to be covered), Proper documentation of each diver during dive operation, Task loading in zero visibility environment, Tethered diving and rescues, Past experiences/problems encountered.
6. Navigation Skills - Students will be taught and practice basic underwater navigation skills to include use of navigation board, use of console compass, Kick counts vs. timed runs and current considerations.
7. Lifting techniques in an underwater environment - Evidence raising.

8. Hull search techniques.

9. Navigation and emergency drills conducted at shallow, medium and deep depths.
10. Mask clearing - Students will learn and practice techniques to be used in the event of mask flooding or fogging.

11. Buddy breathing - Students will learn and practice techniques used to accept air from another diver if their air supply ceases and to give air to another diver who has an air supply failure.

12. Ditch and recovery - Students will learn and practice techniques used to release tangled gear and to recover lost or released gear.

IX. Practical Test

A. Practical Testing

Students will be tested on course curriculum by demonstrating the diving techniques taught throughout the course in several different underwater environments.

X. Roundtable discussion: Equipment, Policy, Trends:

A. This module of instruction will focus on a roundtable discussion with students concerning the standardization of equipment, policy, and any trends identified in the class during

the past week

1. Open discussion on equipment, policy and future trends

XI. Course critique/graduation

A. This module is intended for the course critique and presentation of certificates of completion to each individual student who successfully completed the 240 hr block of instruction.

1. Presentation of Certificate of Completion to Students
2. Written course critique by students
3. Dismissal

PUBLIC SAFETY DIVER COURSE

Hourly Breakdown

Instructor Staff: Deputies James Harrell, Tracy River & Christopher Young

Monday

Tuesday

Wednesday

Thursday

Friday

Training Bureau Material : Diver Course

| | | | | |
|---|---|---|---|----|
| 8 | 9 | 10 | 11 | 12 |
| 0600-0800 <i>Physical training/equipment prep</i> | 0600-0800 <i>Physical training/equipment prep</i> | 0600-0800 <i>Physical training/equipment prep</i> | 0600-0800 <i>Physical training/equipment prep</i> | |
| 0800-1500 Pool work | 0800-1500 Pool work | 0800-1500 Pond work | 0800-1500 Lake work | |
| 1500-1600 <i>Equipment maintenance/cleaning</i> | 1500-1600 <i>Equipment maintenance/cleaning</i> | 1500-1600 <i>Equipment maintenance/cleaning</i> | 1500-1600 <i>Equipment maintenance/cleaning</i> | |
| 15 | 16 | 17 | 18 | 19 |
| 0600-0800 <i>Physical training/equipment prep</i> | 0600-0800 <i>Physical training/equipment prep</i> | 0600-0800 <i>Physical training/equipment prep</i> | 0600-0800 <i>Physical training/equipment prep</i> | |
| 0800-1500 Lake work | 0800-1500 Lake work | 0800-1500 Lake work | 0800-1500 Lake work | |
| 1500-1600 <i>Equipment maintenance/cleaning</i> | 1500-1600 <i>Equipment maintenance/cleaning</i> | 1500-1600 <i>Equipment maintenance/cleaning</i> | 1500-1600 <i>Equipment maintenance/cleaning</i> | |
| 22 | 23 | 24 | 25 | 26 |
| 0600-0800 <i>Physical training/equipment prep</i> | 0600-0800 <i>Physical training/equipment prep</i> | 0600-0800 <i>Physical training/equipment prep</i> | 0600-0800 <i>Physical training/equipment prep</i> | |
| 0800-1500 Aqueduct work | 0800-1500 Lake work | 0800-1500 Ocean work | 0800-1500 Ocean work | |
| 1500-1600 <i>Equipment maintenance/cleaning</i> | 1500-1600 <i>Equipment maintenance/cleaning</i> | 1500-1600 <i>Equipment maintenance/cleaning</i> | 1500-1600 <i>Equipment maintenance/cleaning</i> | |
| 29 | 30 | 1 | 2 | 3 |
| 0600-0800 <i>Physical training/equipment prep</i> | 0600-0800 <i>Physical training/equipment prep</i> | 0600-0800 <i>Physical training/equipment prep</i> | 0600-0800 <i>Physical training/equipment prep</i> | |
| 0800-1500 Ocean work | 0800-1500 Ocean work | 0800-1500 Ocean work | 0800-1500 Ocean work | |
| 1500-1600 <i>Equipment maintenance/cleaning</i> | 1500-1600 <i>Equipment maintenance/cleaning</i> | 1500-1600 <i>Equipment maintenance/cleaning</i> | 1500-1600 <i>Equipment maintenance/cleaning</i> | |

Training Bureau Material : Diver Course

| | | | | |
|---|---|---|---|----|
| 6 | 7 | 8 | 9 | 10 |
| 0600-0800 <i>Physical training/equipment prep</i> | 0600-0800 <i>Physical training/equipment prep</i> | 0600-0800 <i>Physical training/equipment prep</i> | 0600-0800 <i>Physical training/equipment prep</i> | |
| 0800-1500 Ocean work | 0800-1500 Ocean work | 0800-1500 Ocean work | 0800-1500 Ocean work | |
| 1500-1600 <i>Equipment maintenance/cleaning</i> | 1500-1600 <i>Equipment maintenance/cleaning</i> | 1500-1600 <i>Equipment maintenance/cleaning</i> | 1500-1600 <i>Equipment maintenance/cleaning</i> | |
| 13 | 14 | 15 | 16 | 17 |
| 0600-0800 <i>Physical training/equipment prep</i> | 0600-0800 <i>Physical training/equipment prep</i> | 0600-0800 <i>Physical training/equipment prep</i> | 0600-0800 <i>Physical training/equipment prep</i> | |
| 0800-1500 Ocean work | 0800-1500 Ocean work | 0800-1500 Ocean work | 0800-1500 Ocean work | |
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