Cephalopods Diver

Distinctive Specialty Course

Instructor Guide

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for

Sail Dive Explore–PADI #420266

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Introduction

This section includes suggestions on how to use this guide, an overview of course philosophy and goals and describes ways you can organize and integrate student diver learning.

How to Use this Guide

This guide speaks to you, the **Cephalopods Diver Distinctive Specialty Instructor.** The guide contains three sections:

1. Standards specific to this course
2. Knowledge development presentations
3. Details for the open water dives

All required standards, learning objectives, activities, and performance requirements specific to the Cephalopods Diver course appear in **boldface** print. **The boldface assists you in easily identifying those requirements that you *must* adhere to when you conduct the course.** Items not in boldface print are recommendations for your information and consideration. General course standards applicable to all PADI courses are located in the General Standards and Procedures section of your PADI *Instructor Manual.*

Course Philosophy and Goals

The purpose of the Cephalopods Specialty Diver Course is to foster a deeper appreciation and understanding of the fascinating world of cephalopods. This distinctive specialty course is designed to provide divers with a unique opportunity to explore the behaviors, habitats, and ecological significance of these remarkable creatures. By the end of the course, students will not only have gained specialized knowledge about cephalopods but will also be better equipped to observe and interact with them in their natural environment while practicing responsible diving.

The course philosophy is rooted in the belief that education, observation, and appreciation are key elements of preserving and protecting our marine ecosystems. Through this course, we aim to achieve the following goals:

The goals of the Cephalopods Diver training are to:

1. **Enhanced Knowledge:** To equip divers with in-depth knowledge about cephalopods, including their biology, physiology, behavior, and role in marine ecosystems.
2. **Conservation Awareness:** To instill a sense of responsibility and ethical diving practices, emphasizing the conservation of cephalopods and their habitats.
3. **Practical Skills:** To develop practical diving skills for interacting with cephalopods while minimizing disturbances and protecting their natural environment.
4. **Community Engagement:** To encourage divers to share their newfound knowledge and enthusiasm for cephalopods with the broader diving community, thereby promoting responsible diving practices.

Course Flow Options

This course contains knowledge development and two open water training dives. **You may rearrange skill sequences within each dive; however, the sequence of dives must stay intact.** You may add more dives as necessary to meet student divers' needs. Organize your course to incorporate environment-friendly techniques throughout each dive, to accommodate student diver learning style, logistical needs, and your sequencing preferences.

Section One: Course Standards

This section includes the course standards, recommendations, and suggestions for conducting the Cephalopods Diver course.

Standards at a Glance

Topic	Course Standard
Minimum Instructor Rating	PADI Instructor in active status PADI Cephalopods Diver Distinctive Specialty Instructor
Prerequisite Certification(s)	**Required:** PADI Junior Open Water Diver (or) PADI Open Water Diver (or) a qualifying certification. **Recommended:** PADI Advanced Open Water Diver Enriched Air (Nitrox)
Minimum Age	**10 years**
Ratios	**Open Water:** 8:1, with 4 additional student divers allowed per certified assistant For any open water dive that includes 10–11-year-olds, the maximum ratio is 4:1, no more than 2 of the 4 students may be aged 10 or 11. You may not increase this ratio with the use of certified assistants.
Maximum Depth	18 meters/60 feet Junior Open Water Diver: 12 meters/40 feet
Recommended Hours:	10
Minimum Open Water Dives	2

Materials and Equipment

Materials

- Instructor: Cephalopods Diver Course Instructor Outline
- Student: Cephalopods Diver Course Participant Guide

Equipment

- Instructor: equipment as outlined in the PADI *Instructor Manual*, General Standards and Procedures
- Student equipment as outlined in the PADI *Instructor Manual*, General Standards and Procedures

Prerequisites

Instructor Prerequisites

To qualify to teach the Cephalopods Diver course, an individual must be a Teaching status PADI Open Water Scuba Instructor (OWSI) or higher. PADI Instructors may apply for the Cephalopods Diver Distinctive Specialty Instructor rating after completing a Specialty Instructor Training course with a PADI Course Director, or by providing proof of experience and applying directly to PADI.

PADI Open Water Scuba Instructors applying directly to PADI for this Distinctive Specialty Instructor rating must:

1. Have issued at least 25 diver certifications. No more than five may be from courses without dives.
2. Have made at least 20 dives in this particular specialty area.
3. Submit a completed PADI Specialty Instructor application, including page 3 – History of Experience.
4. Attach a copy of this outline to their application.
5. If the applicant is not the original author of the outline, attach permission from the author to use the outline.

Student Diver Prerequisites

To qualify for the Cephalopods Diver course, an individual must:

1. Be certified as a PADI Open Water Diver or have a qualifying certification from another training organization.
2. Be at least 10 years old.

Supervision and Ratios

Open Water Dives

A Teaching status PADI Cephalopods Diver Specialty Instructor must be present and in direct control of all activities and must ensure that all performance requirements are met.

The ratio for open water dives is 8 student divers per instructor (8:1), with 4 additional student divers allowed per certified assistant. (Lower the student-to-instructor ratio if appropriate.

For any open water dive that includes 10–11-year-olds, the maximum ratio is 4:1, no more than 2 of the 4 students may be aged 10 or 11. You may not increase this ratio with the use of certified assistants.

Site, Depths, and Hours

Site

Choose sites with conditions and environments suitable for completing requirements. Shallow dives will provide divers with more time to complete tasks. Use different open water dive sites, if possible, to give students divers experience in dealing with a variety of environmental conditions (incorporate environment friendly techniques throughout each dive) and logistical challenges.

Depths

Maximum Depths:

- Open Water Diver: 18 meters/60 feet
- Junior Open Water Diver: 12 meters/40 feet

Hours

The Cephalopods Diver course includes two open water dives. Conduct dives during daylight hours between sunrise and sunset. The minimum number of recommended hours is 10.

Assessment Standards

The student diver must demonstrate accurate and adequate knowledge during the course. During the open water dives, divers must perform all skills - procedures and motor skills in a reasonably comfortable, fluid, repeatable manner as would be expected of a diver at this certification level.

Certification Requirements and Procedures

To qualify for certification, student divers must complete *all* performance requirements for the Cephalopods Diver open water training dives.

The instructor certifying the student diver must ensure that all certification requirements have been met. The certifying instructor must process a Cephalopods Diver certification by submitting a PIC Online, or a completed and signed PIC to the appropriate PADI office.

Links to Other Courses

The Cephalopods course may credit toward the PADI Master Scuba Diver rating. Encourage divers to enroll in other PADI courses that continue to broaden their knowledge and support of their underwater environment including:

- PADI AWARE Specialty
- Peak Performance Buoyancy Specialty
- Underwater Naturalist Specialty
- Dive Against Debris® Specialty.

Section Two: Knowledge Development

Conduct

Use the following teaching outline to conduct knowledge development for the Cephalopods Diver course. The result should be student divers with theoretical knowledge who can adapt what they have learned during the course.

Introduction

Note to Instructor

Have staff introduce themselves and provide some background. Have student divers introduce themselves and explain why they are interested in taking this course.

Course Goals

The goals of the Cephalopods Diver course are to enable you to leave with:

1. **Enhanced Knowledge:** To equip divers with in-depth knowledge about cephalopods, including their biology, physiology, behavior, and role in marine ecosystems.
2. **Conservation Awareness:** To instill a sense of responsibility and ethical diving practices, emphasizing the conservation of cephalopods and their habitats.
3. **Practical Skills:** To develop practical diving skills for interacting with cephalopods while minimizing disturbances and protecting their natural environment.
4. **Community Engagement:** To encourage divers to share their newfound knowledge and enthusiasm for cephalopods with the broader diving community, thereby promoting responsible diving practices.

Course Overview and Schedule

Note to Instructor

Discuss the course sequence, assignments, meeting times, places and other information about all classes, practical application sessions and training dives. Build excitement about the course, particularly the training sessions and dives.

Costs, Equipment Requirements and Paperwork

Note to Instructor

Explain all costs, equipment requirements and logistical details as necessary. Reconfirm prerequisites if appropriate, ensure all paperwork is completed – see Section One, and Paperwork and Administrative Procedures, General Standards, PADI Instructor Manual. Collect outstanding fees.

Performance Requirements and Certification

1. To qualify for any PADI certification, you must meet specific performance requirements.
   a. You pay for the course but must earn the certification.
   b. Performance-based learning is objective centric – a student either meets a requirement or not; your instructor is not arbitrary in assessing performance.

2. Although you must meet all performance requirements, having difficulty does not mean you will be unsuccessful.
   a. You take a course to learn – making mistakes and needing time to master knowledge and skills is part of learning.
   b. You may pick up some things quickly and others slowly; what matters is that you demonstrate mastery – not how long it takes.
   c. You move on at the pace you learn – you may need extra dives or other practice.

3. Upon successfully completing this course, you'll receive the Cephalopods Diver specialty certification.

4. Certification means that you've completed all performance requirements and are trained to:
   a. Plan, organize, make, and log Cephalopods open water dives in conditions generally comparable to or better than, those in which you are trained.
   b. Apply for the PADI Master Scuba Diver rating if you are a PADI Advanced Open Water Diver (or have a qualifying certification from another organization), and a PADI Rescue Diver (or have a qualifying certification from another organization) with certification in four other PADI Specialty ratings and have 50 logged dives.

Knowledge Development Presentation Notes

Topic 1: Introduction to Cephalopods

Learning Objectives

By the end of this section, you should be able to:

1. **Identify** Various Types of Cephalopods: **Describe** and differentiate between different cephalopod species, including octopuses, squids, and cuttlefish.
2. **Understand** the Unique Characteristics of Cephalopods: **Explain** the distinctive features and adaptations that make cephalopods remarkable creatures in the marine world.
3. **Recognize** the Ecological Significance of Cephalopods: **Discuss** the vital role cephalopods play in marine ecosystems and food chains.
4. **Appreciate** the Historical and Cultural Significance: **Understand** how cephalopods have been perceived and utilized by different cultures throughout history.
5. **Demonstrate** an Informed Curiosity: **Express** a deeper appreciation and interest in cephalopods, fostering the desire to learn more about these creatures during the course.

Presentation Notes

1. Identify Various Types of Cephalopods:

a. Start by introducing the students to the main types of cephalopods: octopuses, squids, and cuttlefish.
b. Discuss key characteristics that distinguish each type, such as the number of tentacles, body shape, and habitat preferences.
c. Encourage students to ask questions and provide examples to solidify their understanding.

2. Understand the Unique Characteristics of Cephalopods:

a. Dive into the remarkable adaptations that make cephalopods unique in the marine world.
b. Highlight features such as their complex nervous system, color-changing abilities, and beak-like jaws.
c. Use visuals or videos to showcase these characteristics for a more engaging learning experience.

3. Recognize the Ecological Significance of Cephalopods:

a. Emphasize the importance of cephalopods in marine ecosystems and food chains.
b. Explain how they serve as critical food sources for marine predators including large fish, marine mammals.
c. Share real-world examples and case studies to illustrate their ecological significance.

4. Appreciate the Historical and Cultural Significance:

a. Discuss how different cultures throughout history have viewed and utilized cephalopods.
b. Explore historical myths, art, and culinary traditions involving cephalopods.
c. Encourage students to reflect on their own cultural perspectives on these creatures.

5. Demonstrate an Informed Curiosity:

a. Prompt students to share what aspects of cephalopods intrigue them the most.
b. Foster a classroom discussion where students can express their curiosity and questions.
c. Emphasize that their curiosity is the foundation for their continued learning and engagement in the course.

Topic 2: Cephalopod Biology and Behavior

Learning Objectives

By the end of this section, you should be able to:

1. **Identify** Anatomy and Physiology: **Describe** cephalopod anatomy and its role in their unique abilities.
2. **Explain** Behavior and Communication: **Clarify** cephalopod behaviors and communication methods.
3. **Differentiate** Reproduction and Life Cycle: **Understand** cephalopod reproduction and their life cycle stages.
4. **Recognize** Conservation and Ethical Diving Practices: **Identify** threats to cephalopods and learn responsible diving practices.
5. **Learn** Practical Diving Skills: **Acquire** pre-dive planning, specialized equipment, and techniques for observing cephalopods responsibly.

Presentation Notes

1. Anatomy and Physiology:

a. Begin by delving into the anatomy and physiology of cephalopods.
b. Discuss their key anatomical features, including their soft bodies, tentacles, and the unique structure of their heads.
c. Explain how their bodies facilitate their impressive swimming and hunting abilities.

2. Behavior and Communication:

a. Explore the complex behaviors and communication methods of cephalopods.
b. Highlight their sophisticated nervous systems, intelligence, and problem-solving abilities.
c. Share specific examples of cephalopod behaviors, such as hunting strategies and communication through chromatophores.

3. Reproduction and Life Cycle:

a. Describe the reproduction and life cycle of different cephalopod species.
b. Discuss the various methods of reproduction, including external and internal fertilization.
c. Explain the different stages in the life cycle, from hatching to adulthood, and the challenges cephalopods face.

4. Conservation and Ethical Diving Practices:

a. Address the threats that cephalopods face in the marine environment, including overfishing, habitat destruction, and climate change.
b. Highlight the importance of cephalopod conservation and their role in maintaining ecosystem balance.
c. Discuss responsible diving practices to minimize disturbance to cephalopods and their habitats.

5. Practical Diving Skills:

a. Discuss the significance of thorough pre-dive planning when aiming to observe cephalopods.
b. Introduce specialized equipment, such as underwater cameras and dive lights, to aid in cephalopod observation.
c. Explain essential diving techniques for approaching cephalopods without causing stress or harm.

Topic 3: Conservation and Ethical Diving Practices

Learning Objectives

By the end of this section, you should be able to:

1. **Understand** Conservation Challenges: **Identify** and describe the major threats to cephalopods and their habitats in the marine environment.
2. **Appreciate** Conservation Significance: **Recognize** the ecological and environmental importance of conserving cephalopods and the broader marine ecosystem.
3. **Advocate** for Conservation: **Understand** the role of divers in cephalopod conservation and be able to advocate for responsible diving practices.
4. **Discuss** Ethical Diving Practices: **Explain** and demonstrate the principles and techniques of responsible diving for minimizing disturbance to cephalopods and their environments.
5. **Engage** in Conservation Initiatives: **Explore** opportunities for involvement in cephalopod-related conservation projects and organizations.

Presentation Notes

1. Understand Conservation Challenges:

a. Introduce the major threats to cephalopods, such as overfishing, habitat destruction, and climate change.
b. Explain how these threats impact cephalopods and their ecosystems.
c. Encourage discussion and questions from students to ensure a clear understanding.

2. Appreciate Conservation Significance:

a. Highlight the ecological importance of cephalopods as prey species and their role in maintaining marine biodiversity.
b. Emphasize the interconnectedness of marine ecosystems and the impact of cephalopod conservation on the broader environment.
c. Share real-world examples of the consequences of declining cephalopod populations.

3. Advocate for Conservation:

a. Discuss the responsibility of divers in cephalopod conservation and ethical diving practices.
b. Explain how informed and responsible diving can contribute to the protection of cephalopods and their habitats.
c. Encourage students to consider their role in advocacy within the diving community.

4. Discuss Ethical Diving Practices:

a. Define the principles of responsible diving, such as maintaining distance, not disturbing cephalopods, and minimizing physical contact.
b. Describe techniques for approaching cephalopods respectfully and without causing stress.
c. Utilize visual examples or videos to illustrate proper diving conduct.

5. Engage in Conservation Initiatives:

a. Explore various conservation projects, organizations, and initiatives dedicated to protecting cephalopods.
b. Provide information on how students can get involved, volunteer, or support conservation efforts.
c. Encourage students to consider their own potential contributions to cephalopod conservation.

Topic 4: Practical Diving Skills

Learning Objectives

By the end of this section, you should be able to:

1. **Plan** Cephalopod Dives: **Demonstrate** the ability to plan and prepare for dives focused on observing cephalopods, including selecting suitable dive sites and conditions.
2. **Utilize** Specialized Equipment: **Understand** the use of specialized equipment such as underwater cameras, dive lights, and dive computers for cephalopod observation.
3. **Practice** Ethical Approaches: **Learn** and apply responsible diving techniques for approaching cephalopods without causing stress or harm.
4. **Ensure** Dive Safety: **Explain** dive safety measures and emergency procedures specific to cephalopod dives, including buddy procedures and signaling.
5. **Document** Cephalopod Encounters: **Record** and document cephalopod observations during dives using appropriate methods and technology.

Presentation Notes

1. Plan Cephalopod Dives

a. Begin by discussing the importance of thorough pre-dive planning for cephalopod dives.
b. Explain how to select suitable dive sites, considering factors like depth, visibility, and local cephalopod habitats.
c. Walk students through the process of assessing weather conditions and ensuring they are conducive to cephalopod observation.

2. Utilize Specialized Equipment:

a. Introduce students to specialized equipment such as underwater cameras, dive lights, and dive computers.
b. Explain the specific functions of each piece of equipment and how they aid in observing cephalopods.
c. Share tips on how to properly maintain and use this equipment effectively underwater.

3. Practice Ethical Approaches:

a. Define and discuss the principles of responsible diving when approaching cephalopods.
b. Describe techniques for maintaining a safe distance from cephalopods and minimizing disturbance.
c. Use visuals or videos to demonstrate proper diving conduct in various cephalopod encounters.

4. Ensure Dive Safety:

a. Highlight the importance of dive safety, especially in the context of cephalopod dives.
b. Explain buddy procedures, signaling, and emergency protocols specific to cephalopod observation.
c. Stress the importance of communication and coordination among dive buddies.

5. Document Cephalopod Encounters:

a. Explain the significance of documenting cephalopod encounters during dives.
b. Introduce methods and technology for recording observations, such as underwater slates, cameras, and dive computers.
c. Discuss how accurate records can contribute to research and conservation efforts.

Topic 5: Community Engagement and Advocacy

Learning Objectives

By the end of this section, you should be able to:

1. **Share** Knowledge: Effectively **communicate** and **share** your newfound knowledge about cephalopods with the broader diving community.
2. **Promote** Responsible Diving Practices: **Advocate** for and **promote** responsible diving practices, emphasizing conservation and ethical conduct in cephalopod encounters.
3. **Participate** in Conservation Initiatives: **Explore** opportunities to get involved in cephalopod-related conservation projects and initiatives, both locally and globally.
4. **Become** a Cephalopods Ambassador: **Act** as an advocate for cephalopod conservation, **inspiring** others to appreciate and protect these creatures and their habitats.
5. **Contribute** to a Diving Network: **Become** an active member of the diving community, sharing experiences, insights, and information related to cephalopods and responsible diving practices.

Presentation Notes

1. Share Knowledge

a. Begin by stressing the importance of sharing knowledge within the diving community.
b. Discuss the various ways to effectively communicate and share newfound knowledge about cephalopods, such as through blogs, social media, and local diving clubs.
c. Encourage students to consider their preferred communication methods and platforms.

2. Promote Responsible Diving Practices

a. Advocate for responsible diving practices when it comes to cephalopods and marine conservation.
b. Discuss the role of divers as ambassadors for ethical diving and conservation, setting an example for others.
c. Share tips on how to engage in conversations with fellow divers about responsible practices.

3. Participate in Conservation Initiatives

a. Introduce students to opportunities for getting involved in cephalopod-related conservation projects and initiatives, both locally and globally.
b. Provide resources and guidance on how to find and join organizations focused on marine conservation.
c. Encourage students to explore their own interests and contribute to projects aligned with their passion.

4. Become a Cephalopods Ambassador

a. Explain the concept of becoming an advocate for cephalopod conservation.
b. Discuss ways to inspire and educate others about the value of cephalopods and the importance of protecting their habitats.
c. Encourage students to share their personal stories and experiences as a source of inspiration.

5. Contribute to a Diving Network

a. Emphasize the significance of becoming an active member of the diving community.
b. Discuss the benefits of sharing experiences, insights, and information related to cephalopods and responsible diving practices.
c. Suggest participation in forums, events, and dive clubs as ways to connect with like-minded individuals.

Section Three: Open Water Dives

General Considerations for Open Water Training

1. Involve student divers in dive-planning activities. Give special attention to student diver anxiety and stress levels, in addition to student diver equipment preparedness.
2. Conduct a thorough briefing. The better the briefing, the more smoothly the dive will proceed. Assign buddy teams according to ability (weak with strong) and establish a check-in/check-out procedure.
3. Assign logistical duties to staff and review emergency protocols.
4. Remind divers to familiarize themselves with their buddy's equipment.
5. Evaluate diver's thermal protection for appropriateness for the dive site and expected conditions.
6. Make yourself available to answer questions during equipment assembly, safety checks and gear-up.

Open Water Dive One

Performance Requirements

By the end of this open water dive, student divers should be able to:

First performance requirement: Identification and Observation of Cephalopods

- Identify at least three different cephalopod species encountered during the dive, including their common and scientific names.
- Demonstrate proper buoyancy control and streamline body position while observing cephalopods to minimize disturbance.
- Observe and document cephalopod behavior and interactions with their environment, noting any unique or interesting observations.

Second performance requirement: Responsible Interaction and Conservation

- Apply ethical and responsible diving practices when approaching cephalopods, maintaining a safe and non-intrusive distance.
- Avoid any actions that may cause stress or harm to the cephalopods or their habitats
- Explain how these responsible practices contribute to cephalopod conservation efforts.

Third performance requirement: Communication and Documentation

- Communicate cephalopod observations and experiences with fellow divers, emphasizing the importance of respectful interactions.
- Use appropriate documentation methods, such as underwater slates, cameras, or digital logs, to record cephalopod encounters.
- Share observations with the instructor or fellow divers upon resurfacing and discuss the significance of their findings.

Additional performance requirements, including those for surface skills, if appropriate:

- Safely perform a buddy check and equipment preparation before the dive.
- Maintain buddy contact and communication throughout the dive.
- Safely ascend and complete a safety stop as required.
- During surface intervals, engage in discussions about cephalopods, conservation, and responsible diving practices.
- Participate in a post-dive debriefing session, sharing observations, insights, and any challenges encountered during the dive.

These performance requirements are designed to ensure that students can safely and responsibly interact with cephalopods during their first open water dive while contributing to their conservation and furthering their knowledge of these remarkable creatures.

Briefing

1. Evaluate the dive site conditions.
2. Identify facilities at dive site.
3. Explain interesting and helpful facts about the dive site, including bottom topography, bottom composition, depth range and points of interest (use a dive site map if appropriate).
4. Describe entry and exit techniques for the dive site.
5. Have buddy teams plan their turn pressure, ascent pressure and reserve pressure for the dive based on gas supply limits.
6. Review the performance requirements and sequence of the training dive with your students.
7. Review communication and other emergency protocols as required by local regulations.

Predive Procedures

1. Involve student divers in the preparation of any specialty equipment required for the dive.
2. Have divers assemble and put on all their equipment.
3. Buddies conduct a predive safety check. Watch for and correct errors as appropriate.

Open Water Dive

1. Entry:
    a. Begin the dive entry with a controlled backward roll, giant stride, or other suitable entry method, as conditions dictate.
    b. Maintain awareness of the surrounding environment and communicate with the dive buddy to ensure a safe entry.

2. Buoyancy check and proper weighting:
    a. Conduct a buoyancy check upon entry to ensure neutral buoyancy and proper weighting.
    b. Adjust weight distribution and buoyancy as necessary to achieve and maintain neutral buoyancy throughout the dive.
    c. Discuss buoyancy control techniques and strategies with the instructor or dive buddy.

3. Descent:
    a. As the dive begins, initiate a controlled descent while equalizing ear pressure as needed.
    b. Perform the first underwater skill for this dive: Identify and observe at least three different cephalopod species while maintaining proper buoyancy and minimizing disturbance.
    c. Perform the second underwater skill: Demonstrate responsible interaction with cephalopods, ensuring a safe and non-intrusive distance.
    d. Perform the third underwater skill: Communicate observations and experiences with the dive buddy, emphasizing the importance of respectful interactions.
    e. Dive within planned depth and time limits, maintaining a depth that aligns with the dive plan and dive computer limits.

4. Ascent:
    a. During the ascent, maintain a maximum rate of ascent not exceeding 18 meters/60 feet per minute or follow dive computer recommendations.
    b. Complete a safety stop for a minimum of three minutes at a depth of 5 meters/15 feet to off-gas and enhance dive safety.
    c. If additional underwater skills are appropriate for the dive, such as further cephalopod observations or interaction, they should be performed during the ascent.

5. Exit:
    a. Upon reaching the safety stop depth, continue the ascent to the surface at a controlled rate.
    b. Upon surfacing, discuss and share observations and insights with the instructor or fellow divers.
    c. Perform any additional surface skills, as appropriate, to fulfill specific performance requirements related to responsible diving practices and conservation.
    d. Safely exit the water using a ladder or appropriate method as determined by the dive site.

This Open Water Dive 1 is designed to help students practice responsible and ethical interaction with cephalopods while enhancing their observation and documentation skills. It also ensures safe dive practices and adherence to dive computer limits.

Post-dive Procedures

1. Have divers stow their equipment and exchange cylinders if appropriate.

Debriefing

1. Provide positive reinforcement and assess performance.
2. Have student divers critique themselves on their performance. Add your observations as appropriate.
3. Log the dive (instructor signs logbook/approves digital log).

Open Water Dive Two

Performance Requirements

By the end of this open water dive, student divers should be able to:

First performance requirement: Night Dive Observation

- Demonstrate the ability to observe and identify nocturnal cephalopods in their natural environment.
- Maintain proper buoyancy and minimize disturbance during night dive observations.
- Document and share nocturnal cephalopod behaviors and interactions.

Second performance requirement: Underwater Navigation

- Apply underwater navigation skills to locate specific cephalopod habitats or observation sites.
- Use compass and natural navigation cues to navigate to the predetermined cephalopod observation points.
- Safely guide the dive group to the target location and return to the exit point.

Third performance requirement: Team Coordination and Safety

- Practice effective communication and coordination with the dive buddy & dive group throughout the night dive.
- Implement safety measures for night diving, including the use of dive lights and signaling devices.
- Discuss and adhere to specific procedures for emergency scenarios in night diving conditions.

Additional performance requirements, including those for surface skills, if appropriate:

- Safely perform a night dive entry and exit, ensuring visibility and minimizing potential entanglement with equipment or marine life.
- Maintain appropriate buoyancy control, utilizing adjustments to manage depth changes in the dark.
- Conduct a thorough post-dive debriefing to share observations, insights, and experiences from the night dive.
- Discuss the unique challenges and benefits of night diving, such as observing different cephalopod species and their nighttime behaviors.

These performance requirements are designed to ensure that students can safely and effectively observe and document cephalopods during night dives, apply underwater navigation skills, and maintain a high level of safety and coordination in the challenging conditions of night diving.

Briefing

1. Evaluate the dive site conditions.
2. Identify facilities at dive site.
3. Explain interesting and helpful facts about the dive site, including bottom topography, bottom composition, depth range and points of interest (use a dive site map if appropriate).
4. Describe entry and exit techniques for the dive site.
5. Have buddy teams plan their turn pressure, ascent pressure, reserve pressure for the dive based on gas supply limits.
6. Review the performance requirements and sequence of the training dive with your students.
7. Review communication and other emergency protocols as required by local regulations.

Predive Procedures

1. Involve student divers in the preparation of any specialty equipment required for the dive.
2. Have divers assemble and put on all their equipment.
3. Buddies conduct a predive safety check. Watch for and correct errors as appropriate.

Open Water Dive

1. Entry:
    a. Begin the dive entry with a controlled backward roll, giant stride, or other suitable entry method, as conditions dictate.
    b. Maintain awareness of the surrounding environment and communicate with the dive buddy to ensure a safe entry into the dark, nighttime conditions.

2. Buoyancy check and proper weighting:
    a. Conduct a buoyancy check upon entry to ensure neutral buoyancy and proper weighting.
    b. Adjust weight distribution and buoyancy as necessary to achieve and maintain neutral buoyancy throughout the night dive.
    c. Discuss the unique buoyancy challenges and benefits of night diving with the instructor.

3. Descent:
    a. As the night dive begins, initiate a controlled descent while equalizing ear pressure as needed.
    b. Perform the first underwater skill for this dive: Observe and identify nocturnal cephalopods in their natural environment.
    c. Perform the second underwater skill: Apply underwater navigation techniques to locate predetermined cephalopod observation points.
    d. Perform the third underwater skill: Demonstrate effective team coordination and safety procedures specific to night diving conditions.
    e. Dive within planned depth and time limits, ensuring adherence to the dive plan and well within dive computer limits.

4. Ascent:
    a. During the ascent, maintain a maximum rate of ascent not exceeding 18 meters/60 feet per minute or follow dive computer recommendations.
    b. Complete a safety stop for a minimum of three minutes at a depth of 5 meters/15 feet to off-gas and enhance dive safety.
    c. If additional underwater skills are appropriate for the dive, such as further nocturnal cephalopod observations, they should be performed during the ascent.

5. Exit:
    a. Upon reaching the safety stop depth, continue the ascent to the surface at a controlled rate.
    b. Upon surfacing, discuss and share observations and insights related to nocturnal cephalopods and underwater navigation with the instructor or fellow divers.

c. Perform any additional surface skills, as appropriate, to fulfill specific performance requirements related to night diving practices and safety.
d. Safely exit the water using a ladder or appropriate method as determined by the dive site.

This Open Water Dive 2 is designed to allow students to experience the unique challenges and rewards of night diving while enhancing their cephalopod observation and underwater navigation skills. It also ensures safe dive practices and adherence to dive computer limits in nighttime conditions.

Post-dive Procedures

1. Have divers stow their equipment and exchange cylinders as appropriate.

Debriefing

1. Provide positive reinforcement and assess performance.
2. Have student divers critique themselves on their performance. Add your observations as appropriate.
3. Log the dive (instructor signs logbook/approves digital log).