

The University of Findlay

Spring 2020

The mission of The University of Findlay is to equip our students for meaningful lives and productive careers.

Course Number : ANSC442: Exploring Shallow and Deep Water Marine Life

Credit Hours: 1.5

Class Time/Place: Loop Abroad Thailand; February 17-22, 2020

Prerequisites, Co-requisites and Course Description:

SCUBA diving provides direct access to observe and study an amazing diversity of underwater marine life up close! This course provides you with basic and advanced theory and skills to safely dive up to a depth of 30m meters in a small group under the direct supervision of a certified divemaster. After the Open Water diver certification, you will proceed to the Advanced Open Water diver certification by tackling a variety of diving adventures each with their own specific theory and advanced diving skills.

Instructor: Erica Ward, DVM

Instructor Contact Information: Erica@loopabroad.com, (617) 412-1743

Office Hours: upon request

Course Objectives:

The following Learning Objectives will be addressed or assessed as part of the course:

- **Apply** what you have learned in the classroom to demonstrate competency in the following theory and skills during your Open Water Diver certification:
 - **Remember** the identification and use SCUBA equipment, including snorkel, exposure, delivery, information, buoyancy, and accessory systems
 - **Apply** competency in SCUBA safety protocols through a demonstration of these learned skills
 - **Analyze** how SCUBA diving affects the human body, including processes such as heat loss, oxygen toxicity, nitrogen narcosis, and sinus equalization among others
 - **Create** a dive plan including safety stops
 - **Apply** your skills to achieve neutral buoyancy at various depths with proper use of the buoyancy control device (BCD)

- **Evaluate** and explain the causes, signs and symptoms of, and prevention of diving-related injuries
- **Apply** your skills to perform basic underwater communication via globally accepted hand signals
- **Apply** what you have learned in the classroom to demonstrate competency in advanced SCUBA diving theory and skills in 5 of the following dives or depending on local conditions:
 - Deep diving: **Understand** and **Apply** the use of the precautions, risks, and proper dive planning for dives to depths of up to 30m
 - Navigation diving: **Understand** and **Apply** the use of 3-D navigation skills using a compass and/or computer and natural underwater features
 - Advanced buoyancy diving: **Evaluate** and demonstrate techniques for managing your vertical position in the water column in challenging environments and positions
 - Night or limited visibility diving: **Understand** and **Apply** the tools and protocols necessary for safe diving at night
 - Conservation diving: **Understand** and **Apply** techniques needed for conducting underwater research and conservation projects
 - Diving with a computer: **Understand** how to use, **Apply** the use of, and **Analyze** results of dive computers to monitor a dive and execute proper bottom times and safety stops
 - Fish identification diving: **Understand** the variety of tropical fish, **Apply** information gained to identify common species, and show proper hand signals for each species

Required Textbooks and Other Materials:

- Scuba Schools International. *Open Water Advanced Adventurer* (e-book provided by mobile app). Fort Collins, Colorado: 2017.
- Materials for notes (notebook and/or laptop, writing utensils, etc.), wristwatch, refillable water bottle, dry bag, sunscreen (must be reef-safe) and insect repellent, bathing suit, rash guard if needed, and snacks.

Instructional Strategies:

Case Analysis		Library and Internet Research	
Debate		Practice/drill	x
Discovery/Independent Research	x	Problem-solving	
Discussion/Questioning/Interviewing	x	Reading assignments	x
Experiential Learning	x	Role-playing/simulation games	

Field Experience	x	Service Learning	
Group Presentation		Video/Audio Review and Critique	
Laboratory Experiences	x	Other	
Lecture	x		

Methods of Assessment: Your course grade will be determined as follows:

Abstracts		Participation	
Attendance	x	Peer Evaluation	
Capstone Project		Portfolio	
Case Study		Portfolio Lab Performance	
Exams	x	Presentations	
Group Projects		Professional Evaluation	
Homework Assignments		Quizzes	
Internet Research		Research project	
Journaling		Other	
Lab Performance	x		
Oral/written review of literature			

Grading: Your course grade will be determined as follows:

Competence in SCUBA skills: 70%

Exam: 30%

Grading Scale/Distribution:

<u>Grade</u>	<u>Points</u>	<u>Grading Scale</u>
A	4.00	93-100
A-	3.67	90-92
B+	3.33	87-89

B	3.00	83-86
B-	2.67	80-82
C+	2.33	77-79
C	2.00	73-76
C-	1.67	70-72
D+	1.33	67-69
D	1.00	63-66
D-	0.67	62-60
F	0.00	below 60
U	0.00	

University Honor Code:

Each and every student of the University will adhere to the following Honor Code:

“I will not knowingly engage in any dishonorable behavior, cheat, steal, lie, or commit any act of plagiarism during any academic work, course, or endeavor. If I observe an act which I believe violates the University’s Honor Code, I may, at my discretion, report it to the appropriate personnel.”

Student Acknowledgement of University Honor Code:

“I acknowledge that I have fully complied or will comply with all aspects of the University’s Honor Code in submitting this work.”

Student Rights and Responsibilities Statement, Article VIII-Academic Integrity:

<http://catalog.findlay.edu/en/current/Undergraduate-Catalog/Student-Rights-and-Responsibilities-Statement/VIII-Academic-Integrity>

University Diversity Statement:

As part of our commitment to achieve excellence, the University of Findlay values and actively promotes a welcoming and supportive environment that honors the many aspects of diversity. We aspire to foster acceptance of, respect for, and appreciation of all persons in our campus community. We celebrate our commonalities and unique differences, and we acknowledge that diversity broadens learning, stimulates creativity, promotes the exchange of ideas, and prepares our students for meaningful lives and productive careers.

Course Policies and Practices:

Attendance and Participation Policy

Students are expected to attend all class meetings for which they are registered. This is regarded as a matter of individual student responsibility. The only excused reasons for absences will be illness that impairs the ability to attend and function within the classroom setting or an unavoidable personal emergency.

Students are expected to attend all class sessions on all days of class. It will be the responsibility of the student to contact the course instructor or site director, preferably before the absence, to provide the appropriate documentation and verification for the reason for the absence, and to make arrangements with the course instructor for missed work. Students are responsible for all missed class material. Students may be subject to limited participation in hands-on practice at the instructor's discretion if they have missed the underlying material needed to safely perform the task at hand.

Final Exam Date: March 7, 2020

Special Services: If you are a student with a disability, it is your responsibility to inform your instructor and register with the Office of Disability Services (ods@findlay.edu) at least one week prior to a needed service so reasonable accommodations can be made.

Course and Instructor Evaluation: Each student is expected to complete the course and instructor evaluation which is sent electronically to the student by the Office of the Registrar. The electronic notification comes in the form of an e-mail from the UF Registrar's Office with the following subject line: Online survey for the designated course (e.g., BIOL 102).

Last Date of Attendance Policy: Instructors are required to indicate the last known date of attendance when a final grade of "F" or "U" is assigned to a student.

Tentative Course Outline:

Depending on your experience level, this course includes Open Water and/or Advanced Open Water SCUBA certification to facilitate observations of marine life in an ecological context. Certifications are provided through Scuba Schools International. Prior SCUBA experience is not required.

Students with no prior experience have the opportunity to complete their Open Water Diver and Advanced Open Water Diver certification.

Students with Open Water Diver certifications before the course begins will complete their Advanced Open Water Diver certification and then join ecological monitoring and coral restoration dives with New Heaven's experienced Research and Conservation team to practice conservation and marine data collection methods.

Students who have completed Advanced Open Water certifications or higher before the course

beginners will not have the opportunity to achieve higher certifications during this course but will start learning and practicing advanced skills related to marine species identification, coral health monitoring, artificial reef construction and maintenance from the first SCUBA day.

Depending on the student's experience level on entry to the course, instructors will have different methods to assess the progress of their SCUBA theory and skills.

Standard Schedule for Divers with No Prior SCUBA Experience	
Day 1	Session 1: SCUBA OW theory 1 Lab Session: SCUBA dive 1 Session 2: Sea turtle and shark identification and population monitoring
Day 2	Session 1: SCUBA OW theory 2 Lab Session 1: SCUBA OW dive 2 Lab Session 2: SCUBA OW dive 3
Day 3	Session 1: SCUBA OW theory 3 Lab Session 1: SCUBA OW dive 4 Lab Session 2: SCUBA OW dive 5 Exam: SCUBA OW certification final exam
Day 4	Session 1: SCUBA ADV theory 1 Lab Session 1: SCUBA ADV dive 1 Lab Session 2: SCUBA ADV dive 2
Day 5	Session 1: SCUBA ADV theory 2 Lab Session 1: SCUBA ADV dive 3 Lab Session 2: SCUBA ADV dive 4

The advanced SCUBA theory topics you cover in your course will directly depend on tides, weather, and other conditions at dive sites. Your dive instructor will select from the following list of adventure dives and teach you the specific theory and practical skills required for going beyond the experiences in your Open Water Basic dive certification:

- Deep diving (to a depth of 30m)
- Navigation diving
- Advanced buoyancy diving
- Night or limited visibility diving
- Conservation diving
- Diving with a computer
- Fish identification diving