

**Nova Southeastern University
Oceanographic Center**

Course Syllabus (Winter II 2016)

Last Date Revised: October 2015

I. COURSE NUMBER AND TITLE:

Scientific Diving and Coral Reef Assessment

Course Number: OCMB 9700

Days: Monday April 1 to Friday April 22 2016

Time: 8:30am (8am on dive days) – 3:00pm daily

Building & Room: TBD

II. INSTRUCTORS:

David Gilliam, Ph.D.

Assistant Professor

Office: COE Room 222

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Lance Robinson, Captain

Diving Safety Officer

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Kate Correia

Teaching Assistant

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III. COURSE DESCRIPTION:

This course is designed to teach basic scientific diving techniques, especially as applied to coral reef assessment, and provide continuing SCUBA diving education. Upon successful completion of the course, the student will be a Scientific Diver in the NSU OC Scientific Diving Program. In addition, the student will have the opportunity (not required as part of the course) to acquire higher recreational PADI certifications including: Advanced Open Water Diver, Rescue Diver, and several other specialty certifications.

IV. LEARNING OUTCOMES:

At the conclusion of this course the student will be able to:

1. Demonstrate the skills and knowledge required to be a Scientific Diver in good standing within the Nova Southeastern University Dive program.
 - a. Demonstrate the proper use and maintenance of all scuba diving equipment
 - b. Demonstrate the use of dive tables and the diving physics related to safe depth and bottom time limits
 - c. Demonstrate proper and safe buoyancy control
 - d. Demonstrate the use of a compass and appropriate underwater navigation skills
 - e. Demonstrate the knowledge and skills required to be a trained rescue diver
2. Demonstrate a basic understanding of the issues related to scuba diving-based coral reef assessment techniques:
 - a. Discuss the advantages and disadvantages of various coral reef assessment techniques especially within the context of project objectives, specific field environment conditions, and limitations in resources.
 - b. Demonstrate the skills and knowledge required to collect appropriate data utilizing coral reef assessment techniques discussed in lecture.

V. COURSE REQUIREMENTS AND MATERIALS:

To Be Completed Prior to Class

1. Certified Open Water diver (PADI, NAUI, YMCA, SSI, etc.).
2. Complete NSU OC Dive file which includes:
 - a. Copies of all SCUBA certification cards
 - b. Signed waivers
 - c. Proof of dive equipment inspection (required before first field day)
 - d. Proof of dive insurance (DAN, PADI, etc.) (required before first field day)
 - e. Complete NSU OC Dive Program folder
 - f. Medical Examination and Completed Forms (required before first dive day)
3. CPR, First Aid, and O₂ training

Required Materials

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| <ol style="list-style-type: none">1. Dive Equipment<ol style="list-style-type: none">a. Mask, snorkel and finsb. Buoyancy Control Device with power inflatorc. Regulator with alternate air sourced. Pressure gaugee. Depth gaugef. Timing device | <ol style="list-style-type: none">g. Compassh. Dive knifei. Slatej. Wet suitk. Weight belt and weightsl. Whistle2. NSU OC Dive Program Manual3. Dive Log and Repetitive Dive Table |
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VI. COURSE SCHEDULE AND TOPIC OUTLINE (subject to change):

Day	Date	Lecture Topics
Mon	11 Apr	Course and SD Program Introduction Diving Skills: Boat Diving, Dive Tables, Peak Buoyancy, U/W Navigation and Knots Diving Skills: Pre-dive in-water assessment, equipment, buoyancy and compass check
Tues	12 Apr	Diving Skills: Diving Physics, Search and Recovery Assessment/Monitoring: Intro. to Assess., Sampling & Site Selection
Wed	13 Apr	Dives 1 & 2 Diving Skills: Navigation & Search and Recovery
Thurs	14 Apr	Assessment/Monitoring: Techniques/Protocols Diving Skills: Rescue
Fri	15 Apr	Dives 3 & 4 Diving Skills: Line Intercept and Fish Transect
Mon	18 Apr	Diving Skills: Rescue (Dives 5 & 6) Diving Skills: GPS, Maps, equip maintenance Assessment/Monitoring: Techniques/Protocols
Tues	19 Apr	Diving Skills: Rescue (Dives 7 & 8) Assessment/Monitoring: Techniques/Protocols
Wed	20 Apr	Dives 9 & 10 Diving Skills: Deep Dive & Point Intercept
Thurs	21 Apr	Dives 11 & 12 Diving Skills: Belt Transect & Fish RVC
Fri	22 Apr	Presentations SD Exam

Note: Because of weather affecting dive days, this is a tentative schedule that may be changed.

VII. GRADING CRITERIA:

1. Attendance and participation in lecture and field activities are required and will constitute 1/3 of the final grade.
2. Students will be required to prepare a short reef assessment presentation which will constitute 1/3 of the final grade.
3. There will be a final Scientific Diver exam which will constitute 1/3 of the final grade.

VII. COURSE REQUIREMENTS AND POLICIES:

INSTRUCTIONAL APPROACH

Dr. Gilliam's office hours will be from 4:00-6:00 p.m. on Mondays, and Captain Robinson's office hours will be from 4:00-6:00 p.m. on Tuesdays. Both will also be available at other times by appointment in advance. We use a motivational, challenging, and enthusiastic teaching approach, and encourage you to communicate with us as frequently as you prefer or require. **Please note that pursuant to Nova Southeastern University policy, we will only respond to email coming from your NSU email account.** We cannot respond to email sent from a hotmail, msn, yahoo, etc. email account. We encourage questions during lecture and during and between dives. If a conflict should arise, please come and speak with either of us as soon as possible. We are willing to negotiate a mutually agreeable resolution to most problems.

ATTENDANCE

Attendance is required and will be taken during every lecture and dive day. Missed lectures will affect your final grade. If there is a chance that you will miss a full or partial lecture day or dive day, please meet with Dr. Gilliam and/or Captain Robinson as soon as you become aware that you may miss time.

ACADEMIC HONESTY

In order to ensure the highest standards of academic honesty and ethical behavior, the NSU policies on cheating and plagiarism will be strictly enforced. See the NSU Student Handbook for more information at <http://www.nova.edu/cwis/studentaffairs/forms/ustudenthandbook.pdf>. We are empowered by the policy to penalize a student suspected of academic dishonesty, plagiarism, or otherwise misrepresenting work and we will do so and report that student to the Dean of the OC. Nova Southeastern University has contracted with **turnitin.com** to provide plagiarism detection services, and I will submit any suspicious documents to this service.

The use of cell phones, or any other electronic devices not specifically allowed by me, during an exam is not permitted. The use of such devices for any reason will be assumed to be for the purposes of cheating and will result in your dismissal from class and administrative action up to permanent expulsion from all NSUOC programs. If you need the phone for emergency notifications, or the like, leave the phone with me or the proctor at the start of class. You will be immediately notified if there is an incoming call.

EXPECTATIONS

You can expect that we will arrive on time for lectures and be well prepared. You can expect that we will be clear about my expectations and the criteria we use in assigning grades and that we will be fair and equitable. We will treat everyone in the class with consideration and respect.

We expect you to come to class, arrive on time, and be prepared for lecture and lab. We expect you to turn off your cell phones, pagers, and hand-held electronic devices as a gesture of reciprocal respect. If you bring a computer to class, we expect you to use it to take notes and record classroom information. We expect you to stay awake, take notes, participate in discussions and ask questions.

KEYS TO SUCCESS

In order to maximize your performance in this course, We suggest that you attend every lecture, dive day, pay close attention, take good notes, and participate in the discussions. Later, rewrite your class notes in order to ensure that you understand everything. Do not hesitate to come to us with questions or concerns about past lecture material.

X: UNIVERSITY-WIDE POLICY STATEMENTS

A. Academic Misconduct: Academic misconduct appears in a variety of forms (including plagiarism). It is a violation of NSU academic policy and may be punished in a variety of ways, from failing the assignment and/or the entire course to academic probation, suspension or expulsion. If you have questions about what constitutes academic misconduct before handing in an assignment, see your instructor or the NSU Student Handbook at

<http://www.nova.edu/cwis/studentaffairs/forms/ustudenthandbook.pdf>.

B. ADA Policy: Nova Southeastern University provides accommodations for students with documented disabilities. If you have a disability for which you believe you require accommodation, please contact Academic Services (<http://www.nova.edu/disabilityservices/>, 954-262-7189).

C. Last Day to Withdraw: It is your responsibility to formally withdraw from this course by completing the appropriate forms before the fourth week of the quarter in order to receive a partial refund (<http://www.nova.edu/ocean/coursepolicy.html>). A request for tuition refund must be made in writing at the time of withdrawal. Refunds will be made solely at the option of the university and will be based on the legitimacy of the reason for withdrawal. Should you fail to appropriately withdraw from this course, and then earn a grade below your expectations, We will do what We can to see that the grade is reported on your transcript. We will NOT backdate paperwork so that you can avoid earning a grade lower than you like.

D. Email Policy: All email communications between students and faculty must be conducted via NSU email accounts (<http://www.nova.edu/common-lib/policies/emailcomm.policy.html>). This requirement will assist NSU in communicating more effectively and protecting your privacy. Emails sent to faculty from non-NSU accounts will be returned to the sender with instructions to resend the communication from your NSU account. To set up an NSU email account or to get help with an existing account, go to https://www.nova.edu/sbin/account_request. Also, the computer help desk is available to assist you with questions regarding your NSU email account. It can be reached at 954-262-HELP (4357).

E. Student Course Evaluations: Student comment and feedback evaluating each college class is an important tool to evaluate program effectiveness. Participation in this process is a responsibility of each student.