

CORAL REEF ECOLOGY

EBIO 4090-800 -- TWO SEMESTER HOURS of CREDIT
Sunday, December 27, 2009 – Sunday, January 10, 2010

UNIVERSITY OF COLORADO
SIX DAYS IN BOULDER - EIGHT DAYS IN COZUMEL, MEXICO

This is a once-a-year intensive, field-oriented, two-week ecology course, emphasizing coral reefs. Six days of lectures on the Boulder campus will be followed by eight days of field work, requiring low-impact SCUBA techniques on the reefs in the Caribbean at Cozumel, Mexico. The course will focus on the ecology, behavior, and interrelatedness of the tremendous variety of organisms living in association with a coral reef. This is one of the world's most complex and colorful ecosystems, and those fortunate enough to be comfortable under water have an opportunity to observe and study the organisms living there and the relationships they have with one another in a way others can only imagine. The reefs at Cozumel are considered by some to be among the most beautiful anywhere.

Incorporated into the course will be many of the instructor's experiences as well as many of the thousands of underwater images he has taken on coral reefs all over the world. This course will also be useful in enhancing the general ecology and field biology backgrounds of liberal arts students who have met the academic pre-requisites of having taken an ecology course.

There will be required readings, lectures, discussions, videos, DVDs and a written exam counting 30% of the course grade in Boulder prior to departure for Cozumel. A scientifically researched library project paper on some aspect of coral reef ecology counting 60% of the course grade will be initiated in Boulder and must be turned in no later than 4:00 pm Thursday, January 21st. A field journal or log reflecting on lectures, readings, previous biology courses and the reef excursions will be compiled after each dive and count 10% of the course grade. It is due to be turned in by the first day of class following the return from Cozumel. The above deadlines are firm.

Lectures will be given from 8:30am to 12:30pm beginning on the first day and continuing for six days in Ramaley Building N1B23. **Note:** On day six class ends at 1:00pm. There will be no class on New Year's Day. At 12:00 pm on the last day of lecture in Boulder there will be a written final exam covering the lectures, videos, DVDs and text. The participants depart DIA for Cozumel the next morning, returning to Denver one week later in the evening. Accommodations for eight days and seven nights will be based on double occupancy at a Cozumel hotel, ideally located about a mile south of the downtown area adjacent to the best coral reef shore diving on the island.

Students must be certified SCUBA divers who are comfortable under water. A refresher SCUBA pool session will be required of anyone who has not been diving within a year. SCUBA certification courses are available at the CU Recreation Center and local area dive shops. Diving will consist of a dusk beach dive on the day of arrival, two beach dives the next day in front of the hotel, four two-tank boat, drift dives and one boat night dive. Dive boat pick-up and drop-off will be at the hotel's dock, and unlimited free tanks for beach diving on the reefs in front of the hotel are provided. The water temperature will range between 78 and 84°F.

The textbook is *A Field Guide to Coral Reefs of the Caribbean and Florida* by Eugene H. Kaplan, 1999, Houghton Mifflin Co., Boston, and is available at the University of Colorado Bookstore on the Boulder campus.

PRE-REQUISITES: Any college-level course in ecology is a required prerequisite if academic credit is desired, plus Open Water SCUBA certification. If a non-CU student wishes to participate he/she may register for the course through Continuing Education and may do so for credit or for no credit. Taking the course for no credit would be the usual option for one who has not previously taken an ecology course.

COSTS: \$2400 **Course Package Includes:** round trip air fare from Denver; airport-to-hotel transfer; double occupancy lodging at the hotel; hotel tax; hotel maid tip; hotel bell captain tip; all hotel beach diving (both day and night); all boat diving; a one-year Diver-Accident-Medical Insurance Policy; light lunches on boat-diving days; boat captain tip; divemaster tip; a PADI Distinctive Specialty Certification in "Coral Reef Ecology;" a CU/Cozumel T-Shirt and CU course credit for fall-semester CU students. Note that if these two hours of credit increase one's fall-semester load beyond the maximum of eighteen hours, he/she will incur additional tuition costs.

Pre-trip payment schedule (attached) is designed to collect funds to pay for air fares, hotels and diving expenses at an early date, so as not to be caught with last-minute holiday price increases. However these same costs are not determined by the travel brokers until June or July, so prior to that time they are still only estimates. The course cost, as reflected in this document, is thus an estimate based on the past history of dealing with the travel brokers. Should unexpected price increases happen, then the cost of the trip will have to be increased, and this increase will be passed on to the participant. Once set, the cost of the course has only had to be increased twice since the mid 1980s and it is not anticipated to rise this year; but it could happen!

DEPOSIT: \$400 due at the time of registration. \$100 of this deposit is non-refundable, and the whole deposit of \$400 is forfeited if the participant cancels after the Final Payment is due (see page three) and there is no waitlisted substitute participant to take his/her place. This has never happened. Penalty fees charged by airlines, hotels and travel agents for schedule changes and/or cancellations will be the responsibility of the student.

COSTS NOT INCLUDED: Expenses during the week in Boulder; textbook; course credit for non-CU students; Cozumel meals; personal SCUBA equipment (tanks, belts and weights are provided); incidentals; transportation from the hotel to the airport may or may not be included, depending on our travel broker; the Mexican departure tax of about \$12 (This is usually included with the airline ticket, but not always).

NOTE: Lectures will begin promptly at 8:30am on the first day of class, and students are required to be there!! **Be sure your holiday flight plans are arranged to coincide with the times the class meets.**

**ADDITIONAL
INFORMATION:**

Mel Cundiff, <http://spot.colorado.edu/~cundiff/>
Ecology and Evolutionary Biology, Ramaley C170
University of Colorado, Boulder, CO 80309-0334
Phone (303) 492-8549, email: cundiff@colorado.edu
(If Mel isn't available try Linda at 303-492-8988)

**CORAL REEF ECOLOGY COURSE
FALL SEMESTER 2009
PRE-TRIP PAYMENT SCHEDULE**

All prices are subject to change due to unforeseen rate increases. Note that this payment schedule is designed to collect funds to secure hotel bookings and purchase airline tickets at an early date to avoid holiday price increases.

	DUE DATE	PAYMENTS
DEPOSIT	At registration	\$ 400
1st Payment	Friday, July 10 th	\$ 500
2nd Payment	Friday, August 28 th	\$ 500
3rd Payment	Friday, October 2 nd	\$ 500
FINAL PAYMENT	Monday, November 4 th	\$ 500
TOTAL		\$2400

PRE-TRIP MEETING

DATE: Monday, Nov. 9, 2009

TIME: 7:00pm

PLACE:

Weaver's Dive Center
Table Mesa Center
637V South Broadway
Boulder, CO 80303
303-499-8500
<http://www.weaversdive.com/>

PAYMENT *via* CHECK ONLY:

MAKE PAYABLE TO: University of Colorado

MAIL TO (or deliver to):

Mel Cundiff, RAMY C170
Ecology and Evolutionary Biology
334 UCB
University of Colorado
Boulder, CO 80309-0334

INFORMATION:

Mel Cundiff 303-492-8549
Linda Bowden 303-492-8988

CANCELLATION POLICY

One hundred dollars of the deposit is non-refundable. The total deposit of \$400.00 is not refunded if a participant cancels after the Final Payment is due (see above) and there is no person waitlisted to take his/her place. Penalty or transfer fees charged by airlines, hotels and travel agents for schedule changes and/or cancellations will be the responsibility of the participant.

4/03/09