IB496 – NATURAL HISTORY OF CORAL REEFS (1 hr. credit)

Course Description:

An introduction to the taxonomic groups, identification, and natural history of both vertebrates and invertebrates that inhabit and form coral reefs. Ecosystem processes and conservation of coral reefs will also be discussed. One 1.0 hr. lecture per week from 21 January to 13 March plus a week-long field trip to Belize during Spring Break (15-22 March). A course fee of approximately $2300 will be assessed to cover all travel expenses to Belize.

Instructor:

Dr. Christopher A. Taylor, 393 Natural Resources Building, 244-2153, cataylor@illinois.edu
Office Hours: By appointment

Course Requirements

Students must have the approval of instructor prior to registering for course and have taken IB 150 or an equivalent course. Students must be proficient swimmers and possess a valid passport.

Students with disabilities who require assistance to participate in this class are asked to see the instructor during the first week of class.

Course Objectives:

To develop an understanding of and an appreciation for coral reefs. The course will stress the natural history of coral reef ecosystems and deal with the identification, biology and life history of the common coral reef organisms found in the Caribbean Sea. The conservation of and threats to coral reefs will also be discussed. The lab will emphasize field experiences on coral reefs, and focus on the ecology and identification of common reef species and will consist of a week-long field trip to Belize during Spring Break.

Student Learning Outcomes:

At the end of this course, students will be able to:

identify major invertebrates and vertebrates that inhabit and form coral reefs
explain major coral reef ecosystem processes
demonstrate an understanding of coral reef conservation
apply basic natural history observational skills

Course Calendar

DATE	LECTURE TOPIC
Week 1	Course introduction, field trip information, classification of marine ecosystems
Week 2	Distribution of reefs, how reefs are built, adaptations to marine life
Week 3	Invertebrates of coral reefs
Week 4	Invertebrates of coral reefs cont./ Vertebrates of coral reefs
Week 5	Vertebrates of coral reefs cont.
Week 6	Coral reef processes/ecology of coral reefs.
Week 7	Mangroves, conservation of coral reefs
Week 8	Lecture Exam
Week 9	**FIELD TRIP**

Basis of Grade:

1 hour lecture exam during week of March 9th = 125 points
participation in field trip, field notebook, and final exam at end of the field trip =175 points

Total points 300

Letter grades will be assigned according to the following standard scale:

Letter Grade	Percentage	Total Points
A	90-100%	270 - 300
B	80 - 89.9	240 - 269
C	70 - 79.9	210 - 239
D	60 - 69.9	180 - 209
F	0 - 59.9	0 - 179

Attendance Policies:

ATTENDANCE AT LECTURE IS REQUIRED. There is no textbook for the lecture component of this course, so material for the lecture exam will be derived entirely from the lecture material. Lecture slides (e.g., PowerPoint presentations) WILL NOT necessarily cover all material discussed during class. Therefore, there is no substitute for regular attendance in lecture. If attendance is not possible, it is the responsibility of the student (i.e., YOUR responsibility) to contact the course coordinator PRIOR to your absence to arrange for any lecture materials distributed in class.

ATTENDANCE AT FIELDTRIP IS ABSOLUTELY REQUIRED.

Lectures

Lectures will be available for download prior to class on Compass 2G. If you do not have access to Compass 2G please contact Dr. Taylor immediately.

Academic Integrity:

It is the responsibility of each student to refrain from infractions of academic integrity, from conduct that may lead to suspicion of such infractions, and from conduct that aids others in such infractions. It is the responsibility of the instructor to uphold the academic integrity policy of the University found at: http://studentcode.illinois.edu/article1/part4/1-401/

All students are assumed to have read and to understand the UI Student Code.

Field Trip

Belize is home to the largest coral reef in the Western Hemisphere and the second largest in the World. The field trip for this course will be held from 15-22 March 2020 at Belize Marine TREC (Tropical Research and Education Center) located on Ambergris Caye, off the northeastern coast of Belize. The majority of our time in Belize will be spent on the water visiting different reef and near-shore coastal habitats. Students will be required to provide their own snorkeling equipment. Students will also be required to maintain a field notebook/journal with species lists and natural history observations. Course fee will cover airfare and three meals a day as well as lodging at Belize Marine TREC and required supplement health insurance. Students are encouraged to bring extra money for miscellaneous expenses.

Textbooks required for field trip (*= required):

*Humann, P. and N. DeLoach 2013. Reef Creature Identification: Florida, Caribbean, Bahamas – **3rd Edition**. New World Publications. ($30.33 at Amazon.com)

*Humann, P. and N. DeLoach. 2014. Reef Fish Identification: Florida, Caribbean, Bahamas – **4th Edition**. New World Publications. ($31.19 at Amazon.com)

Humann, P. and N. DeLoach. 2002. Reef Coral Identification: Florida, Caribbean, Bahamas – 3rd Edition. New World Publicataions. ($29 at Amazon.com)