

## Spend Spring Break on a Caribbean Island

# Coastal Biology

A field and lecture course

Field trip 2 – 9 Mar 13



- visit coral reefs, seagrass beds and mangroves
- conduct field research on tropical marine ecosystems
- study, learn and relax on a tropical island
- Curacao is a beautiful, tropical island in the southern Caribbean.



Biol 482 is a combination lecture and intensive field course designed to introduce participants to the Caribbean coral reef biome and other near-shore environments such as rocky shores, mangroves and seagrass beds. Students will learn through theoretical and practical exercises how environmental and biological factors interact to sustain near-shore ecosystems. We will discover and describe the amazing diversity of coral reef, seagrass and mangrove systems, explore the physiological and behavioral adaptations that enable organisms to live in these environments and deduce the basic ecological principles that underlie the function of near-shore ecosystems. Students may choose to focus on current issues in marine conservation science as part of their class projects.

Topics may include but are not limited to connectivity among marine populations, predator-prey interactions, disease dynamics, adaptation to climate change, and conservation genetics.

A field trip during spring break will take us to the beautiful island of Curacao, part of the Netherland Antilles in the southern Caribbean. Healthy coral reefs, mangroves and seagrass beds are easily accessible from shore and we will study them by snorkeling (students may SCUBA dive in their free time). The colonial past and economic realities in Curacao provide an instructive background to understand the complexity of marine conservation issues today. This course requires strong participation and thus is most suited for highly motivated students.



**Academics.** Students will conceive and carry out their own research projects during the trip. All projects are to be presented orally to the class and handed in as research papers at the end of the spring semester. Faculty will assist and interact closely with students in all aspects of the research projects. During the lecture portion of the class, students will gain the necessary theoretical background for the field trip. Participation in the field trip is not mandatory but highly encouraged for enrolled students. You cannot go on the field trip (1 credit) without enrolling for the lecture (3 credits).

**Eligibility.** Biol 220W is a prerequisite for the class. A statistics course is strongly recommended. Highly qualified students (biology-ecology option majors, ERM majors and marine science minors with high GPAs, as well as students in other science majors, at the professor's discretion) will receive first priority for acceptance. The remaining students will be chosen competitively. Enrollment for the field trip is limited to 10 participants, so you must apply *as soon as possible*. Students must pass a swim test prior to the field trip.

**Fee.** *Full-time (12 credits or more) Penn State students:* Upon acceptance, BIOL 482 (3 or 4 credits) will be added to your spring 2013 semester schedule. A class fee must be paid by all field trip participants. Current estimate is ca. \$800. *Part-time Penn State students:* In addition to the ca. \$800 class fee, a tuition payment appropriate to your semester standing is applicable. *All:* The class fee includes room, board, and transportation in Curacao. Expenses not included: airfare (approximately \$800); spending money (\$50–\$100); and airport exit fee (\$26). Expect to pay about \$1700 total. Participants need to bring their own snorkel gear. Review of applicants will begin immediately and proceed until the class is full. Please return your application including the \$800 course fee by **Dec 15** to ensure consideration for acceptance. This sum is nonrefundable unless the applicant is not accepted. Fees (cash, check or money order) can be paid at the Biology business office, 216 Mueller Bldg, M – F: 9 am – 4 pm.

**University Policies.** *Access*—Penn State encourages individuals with disabilities to participate in its programs and activities. If you anticipate needing special accommodations or have questions about the physical access provided, please contact Iliana Baums at 814-867-0491. *Cancellation*—The University may cancel or postpone any course or activity because of insufficient enrollment or other unforeseen circumstances. If a program is canceled or postponed, the University will refund registration fees but cannot be held responsible for any other related costs, charges, or expenses, including cancellation/ change charges assessed by airlines or travel agencies. *Tuition*—The University reserves the right to revise the schedule of tuition and charges without further notice.

## Application Form BIOL 482 Coastal Biology Trip: 2 – 9 March 2013

**Complete all areas; attach a current, unofficial transcript and receipt of application fee. This form may be duplicated for additional registrations. Please print in ink or type. Return to Penn State by December, 2012. Important—To ensure a timely registration, please include complete information.**

\_\_\_\_\_  
Last name First name Middle initial

\_\_\_\_\_  
Penn State ID no. Birth date (month/day/year)

Male  Female \_\_\_\_\_  
E-mail address Cell phone

\_\_\_\_\_  
Local address (no. and street or box no.)

\_\_\_\_\_  
City State ZIP code

\_\_\_\_\_  
Permanent home address (no. and street or box no.)

\_\_\_\_\_  
City State ZIP code

\_\_\_\_\_  
Local phone Home phone

\_\_\_\_\_  
Emergency contact (Name and Phone)

\_\_\_\_\_  
Address (no. and street or box no.)

\_\_\_\_\_  
City State ZIP code

### ACADEMIC INFORMATION

\_\_\_\_\_  
Major Current semester standing

\_\_\_\_\_  
Total academic credits Grade-point average

Relevant courses and grades received: Summary of previous travel and reasons for applying (using an additional sheet of paper is encouraged):

**Return this application form to the Biology Office with a copy of the receipt for the \$800 course fee to Barbara DeHart  
329 Whitmore Laboratory  
The Pennsylvania State University  
Email: bzd2@psu.edu  
University Park PA 16802**

Penn State is committed to affirmative action, equal opportunity, and the diversity of its workforce.