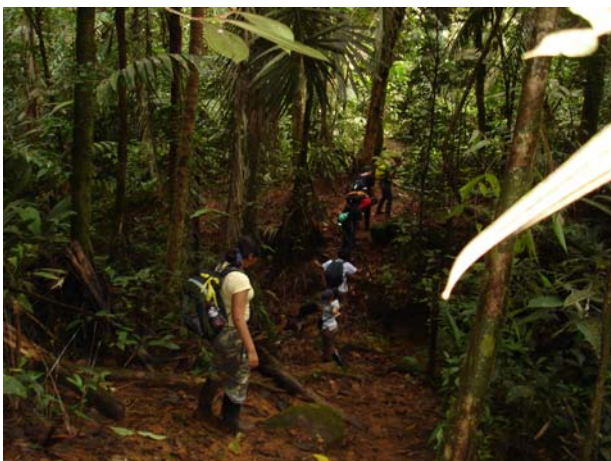


Academic Adventures in Costa Rica, January 2008

This January is the 10th time Dr. Stan Sessions taught his course: Natural History of Costa Rica. Over the last few years, Dr. Peter Fauth has joined Sessions to help make this course a prime academic experience for students, involving "total immersion" in tropical ecology. This year the enrolled students included two JCH scholars and represented a variety of religions and ethnicities, so Sessions and Fauth knew they were in for an unusual experience.



The course is physically challenging, since it involves lots of hiking and some snorkeling, and it is academically challenging as well, with lots of required reading and writing, including several formal research project reports, at least one exam, and a journal of daily activities. Combining their expertise, Pete (a statistically savvy ecologist) and



Sessions (who has been studying tropical biology for nearly 30 years) the two professors were able to kick it up a notch. The result was a prime example of Hartwick students and faculty working together under challenging circumstances to create an extraordinary academic experience, one that students can include on their resumes.

Here is how it played out: Sessions and Fauth developed an ambitious syllabus involving work at five biology field stations located all over the country, including all three stations owned and operated by the well-known Organization for Tropical Studies (OTS for short) and representing a diverse array of habitats from sultry tropical rain forest to frigid alpine tundra. A very rigorous routine was established from the get-go, beginning at 5:30 am for bird observation (optional, but well-attended at first) followed by breakfast from 6:30 - 7:30 am and then a briefing of the day's activities. At each field station the group began right after breakfast with "orientation hikes" to familiarize students with the station grounds and forest habitats. At the first OTS field station at Las Cruces near the Panama border, the group organized a Large Group Project (LGP) on a field research topic that they all worked on together. The LGP was used to demonstrate how to design and perform a research project on tropical ecology, and then



in the evening session (7:30-9:30 pm), the data collected were used to learn how to analyze results using appropriate statistical tests. Evening session was often followed by an optional night hike with flashlights to look for nocturnal organisms in the forest.

On subsequent days at each field station, students were asked to work in pairs using what they learned from the LGP to generate formal proposals for Small Group Projects (SGPs). After sometimes painful brainstorming and formal oral proposal presentation and approval, the small teams worked on their projects in the morning, analyzed their data and wrote reports in the afternoon, and then presented the final reports in the evening.



By the third SGP, the whole group operated like a well-oiled machine as they broke into groups to work up their SGPs. It was observed early on that students tended to pick favorite partners, so to mix things up a bit they were asked them to pick someone with whom they hadn't yet worked. Naturally, at first groups of friends simply shuffled among themselves for the first and second SGP. But by the third SGP everyone seemed to be perfectly comfortable working with someone different (outside their "comfort group")

and they all generated high quality work that improved over time. The course ended, of course, with a big final exam!

A highlight of the course was the Marine Biological Station at Cabo Blanco on the Pacific side, Costa Rica's first and only "absolute reserve". Only a few groups are allowed in per year, and Hartwick was there by special invitation (Dr. Sessions had met the director of the station on a previous trip to another field station). The station offers an unparalleled opportunity for learning marine biodiversity while safely snorkeling in a large, protected lagoon at low tide. Once there, however, it was discovered that two of the students did not know how to swim, and furthermore were not allowed by their religious beliefs to show their bare legs. It was made it clear that snorkeling was optional, of course. Nevertheless, they were determined to learn, and with the help of flotation devices (and wearing long pants),



one of them went right in while Dr. Fauth gently coaxed the other into the water and taught her how to use the snorkeling gear. Soon she too was paddling around the lagoon investigating reef life (see photos below).



This real-world phenomenon was symbolic of the role of faculty as mentor, meeting a student where she is with acceptance and understanding, within the context of high expectations, and patiently helping her become an independent pursuer of knowledge.

The course as a whole was a big success on many levels. Students worked very hard and made good impressions wherever they went. Three were interviewed and accepted into the University of Georgia's Tropical Biology program on the spot. A fourth student took the initiative to introduce herself to a group from the New York Botanical Garden, in Costa Rica to study tropical ferns, and spent a day working with them. They told Pete and Sessions how impressed they were, and they urged her to apply for a position at the Garden. Many other important connections were made as well, including an intimate dinner with Dr. Pedro León, Costa Rica's leading scientist and consultant to current Costa Rica president Oscar Ariás in his new initiative called *Paz con la Naturaleza* ("Peace with Nature"). The whole experience underlined what a Hartwick education is all about: Connecting the classroom to the world by going out and actually experiencing the world. In this case, learning tropical biology by actually living and working in the tropics..



Sophomore Daniel Wasserman is "kissed" by a Masked Treefrog at the Las Cruces Biological Station in Costa Rica.

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