

## Mainland Ecuador & Galápagos — General Info

### Spring 1997

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Office Hours: Mon 1-3 PM  
Tue 11-12 AM  
Thu 11-12 AM  
else by appt.!!

Course Location: 333 Science II

Course Content: This course is intended to infuse global perspectives into your biology experience by exposing you directly to a different culture and biota. In particular, we will focus on the Galápagos Islands because they were crucial to Charles Darwin's development of the theory of evolution by natural selection, they have also been a noted example of the ecological principles of island biogeography and colonization, and more recently they have been at the heart of controversies over the social impact of conservation biology and resource use by humans. From this course, you should gain insight into the value and generation of biological diversity by applying principles obtained in the classroom to nature and by experiencing cultural diversity with its inextricable linkage to nature. We will accomplish these goals with a mixture of lectures and a "once-in-a-lifetime" trip to Ecuador and Galápagos.

Course Prerequisite: Instructor consent

Required Text: *The Beak of the Finch*, by Jonathan Weiner

Classes: I will lecture but I also expect free discussion. I encourage you to ask questions even if they seem incredibly simple. It won't do you any good if you don't understand what we're discussing. Thus, I expect you to attend class and to participate. There will also be an occasional homework assignment to hone your skills. The lecture portion of the course is worth 1 credit (BIOL 394A) and the trip portion of the course is worth 2 credits (BIOL 394B). Grading will be S/F in both cases.

Course Requirements:

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|------------------|----------------------|
| 1) Attendance    | All classes and trip |
| 2) Participation | All classes and trip |

3)	Oral report	Night before each destination
4)	Scientific journal	8 April
5)	Term paper	29 April

1) and 2) Attendance, participation, an occasional homework assignment, and the term paper (see 5) below) are the components of your grade for 394A. More than one unexcused absence or missing homework assignment will be considered grounds for failure, as they would clearly indicate lack of adequate participation. I'm sure this won't be a problem.

3) The oral report should be a short ~20 minute presentation that orients the rest of the class as to what we should expect from our subsequent destination on the trip. Destinations will be assigned by me via a random number table. Tell us a little bit about the uniqueness, history, geology, age, size, location in the archipelago, relationship/distance to adjacent islands, flora, fauna, etc. of your assigned island(s). It would be useful to explain the diversity of the biota in terms of the index of similarity that we will discuss in the second class meeting. In this respect, you and your fellow classmates might consider working together to assess the flora and fauna of each of the islands we will visit in order to compare indices of similarity quantitatively.

4) The idea behind the scientific journal is to get you to look at and think deeply about your surroundings on the trip. Record facts and impressions; try to interpret and synthesize them. See the handout for more information on keeping a journal. Journals are due in class (8 April) several weeks after we return. This will give you time to use the library and other sources to try to interpret questions and synthesize observations that you recorded in your journal during the course of our trip. Late journals will not be accepted. All journals will be returned to you by the end of the semester.

5) The idea behind the term paper is to get you to focus on evaluating the biology of your assigned island(s). Much of the research for this paper can be accomplished when preparing for your oral report. Using the primary literature and your observations from the trip, interpret what we observed relative to what we were "supposed" to see. In addition to the information provided by the research for your oral report, I want you to use this paper to think about the organisms that occur in Galápagos, which ones occur (or used to) on your island(s), why that might be, and what might be in store for these organisms in the future. The term paper should be •6 double-spaced pages, not including figures, tables, or references (•3 non-tourist guide

references). Papers are due in class on the due date (29 April). Late papers will not be accepted.

## Mainland Ecuador & Galápagos — Syllabus

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<u>DATE</u>	<u>TOPIC</u>
1/14	Introduction/How to keep a scientific journal
1/21	Galápagos video
1/28	Geology/Meteorology/Biogeography
2/4	History/Culture/Politics/Travel protocols
2/11	Plants and animals
2/18	Special evening session at State Gym pool to snorkel
2/25	Scientific/Observational/Experimental methods
3/4	Drive to Chicago and stay overnight with Gary Paukstis
3/5	Fly from Chicago to Quito. Stay in Sierraturis Hostal.
3/6	Excursion with a bilingual guide (Robert Johnsson) from Quito to the Mindo Reserve, a famously-diverse virgin cloud forest in the Andes northwest of Quito
3/7	Excursion with a bilingual guide from Quito to the Otavalo Market in the Andes and the Cayapas Reserve, a high-elevation forest and volcanic lake
3/8	Fly from Quito to San Cristóbal Island, Galápagos, and board a chartered boat (the DARWIN) with a bilingual naturalist guide (William Lucin).
We	will visit a sea lion colony on Loberia beach about 30 min from the airport.
3/9	Española Island (Gardner Bay and/or Punta Suarez)
3/10	Santa Cruz Island (Puerto Ayora and Darwin Station)
3/11	North Seymour, Baltra, and Santa Cruz Islands (Bachas Bay)
3/12	Sombrero Chino and Rabida Islands
3/13	Bartolomé and San Salvador Islands

3/14	Plazas and Santa Fé Islands
3/15	Leon Dormido and San Cristóbal Islands, and fly back to Quito. Stay in Sierraturis Hostal.
3/16	Fly from Quito to Chicago and then drive to Ames
3/18	No class
3/25	No class
4/1	No class
4/8	Meet to discuss letter to support conservation efforts <b>SCIENTIFIC JOURNAL DUE IN CLASS!</b>
4/15	No class
4/22	No class
4/29	Share photos <b>TERM PAPER DUE IN CLASS!</b>