BIOLOGY AND GEOMORPHOLOGY OF TROPICAL ISLANDS
Environmental Science, Policy and Management C107 • Integrative Biology C158

Professors:
Pat Kirch, IB
Brent Mishler IB
Vince Resh, ESPM
George Roderick, ESPM (organizer)

GSIs:
Justin Lawrence, ESPM
Erin Meyer, IB
Sonja Schwartz, ESPM

Class website: http://ib.berkeley.edu/moorea

Draft schedule for course— all dates tentative
(9:00 am in 3059 VLSB except where noted; each meeting is important, so we expect full attendance):

Aug 26: Introduction to the class (all professors & GSIs). Questions and answers from students and for students. General features of Tahiti/Moorea, the Society Islands, the Pacific Ocean, Tahiti, and Moorea. Document check: passports, visa update, tutorials, tickets, etc. Course and travel details. Introduction to Gump Station. What to bring to Moorea. Cooking groups. Project review from previous years, discuss what makes a good project, and suggest future potential topics.

Aug 27-Sept 14, Schedule will likely include these topics and others:

Geology meets biology on tropical oceanic islands: tectonics, structural geology geophysics, geomorphology, paleoceanography, climatology, reef structure, and reef evolution (Guest: Carole Hickman)
PM: 1:00-5:00 GIS/GPS Workshop, 124 Mulford Hall (Guests: Maggi Kelly, Jeremy Freund, and Kevin Koy, ESPM)

Peopling of the Pacific; Human impacts on island ecosystems; tour of Kirch Lab (Kirch)
PM: Tours of herbarium and museums (curators of collections)

Coral Reefs (Guest: Jere Lipps)
PM: Discussion of possible projects with current and past GSIs; getting materials together to take; how to take scientific notes (GSIs).

Island biology, with emphasis on plants; Phylogenetics (Mishler)
PM: Trip to French Embassy for people still needing to get scientific visas.

Introduction to library and information resources (Guest: Norma Kobzina) in BioSci Lib. Computer room on the left side as you enter the library on the 2d floor of VLSB.
PM: 1:10-2:30 Ethnobotany of Polynesia (Guest: Tom Carlson)
EVE: 5:30-9:00 REQUIRED SNORKELING AND WATER SAFETY CLASS, PLUS SWIMMING TEST, Hearst Gym then Haas pool (Guest: Jim Hayward, UC Scientific Diving Officer) [bring swimming suit and snorkeling gear]

Terrestrial arthropod diversity on islands; Invasive organisms on islands (Guest: Rosemary Gillspie)
PM: Field exercise on plant and arthropod ecology (Mishler and Roderick)

Introduction to scientific thinking and communication in science; Introduction to statistical thinking (Mishler and Roderick).
PM: Statistics workshop, 1:00–3:00 (Mishler and Roderick).
Freshwater ecology on Moorea (Resh)
PM: Field exercise on stream ecology (Resh)

Methods for characterizing and studying behavior. Opportunities for behavioral study on Moorea. Dangerous marine animals (Guest Roy Caldwell)
PM: Exam on lecture & workshop material

---------- Outline of remainder of semester; more details later ----------

Sept 15: free day to pack and get ready
Sept. 16-18: Travel to Tahiti, arrive at Gump Station on Moorea no earlier than Saturday, Sept 18. and no later than 5pm on Sept 19.
Sept. 19: Sunday evening, first function at Gump Research Station on Moorea
Sept. 20: Bright and early Monday, begin class activities with island tour ...
Oct. 1: *** Remainder of class fees due, $x,xxx, due through CARS ***
Nov. 20: Saturday, class finishes in Moorea. Preliminary draft of complete paper due (draft sections will have been due earlier).
Nov 21-28: Week for independent travel and study -- you must leave Gump Station on Nov. 20, but many like to stay in French Polynesia and tour other islands. A good time to have parents or significant other visit (which otherwise we strongly discourage during the class time). Otherwise, come back to Berkeley and get a head start on your project completion!
Nov. 29: Monday, required class meeting in Berkeley 3059 VLSB at 9 AM.
Nov. 29 - Dec. 10: Intensive work finishing up project: consult with faculty on campus, statistics, use labs and/or libraries, etc. as needed. Prepare presentation and improve your paper draft; format paper. Workshops will be given in these and other areas.
Dec. 9 or 10: Class mini-symposium--project presentations in 15-minute slots all day.
Dec. 14 or 15: 5:00 pm. Final papers due, must be properly formatted for inclusion in the "class reports" book to be deposited in the UCB Library, Gump Station, sponsoring departments, offices of officials in French Polynesia, and posted on the web. We are under a tight schedule to read these, so there will be a penalty for late papers.
Dec. 17: Semester ends; grades available.