"BIOLOGY AND GEOMORPHOLOGY OF TROPICAL ISLANDS"

Environmental Science, Policy and Management C107 • Integrative Biology C158

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

GSIs:  Stephanie Bush, IB  Maya deVries, IB  David Hembry, ESPM

Web sites:
Class: [http://ib.berkeley.edu/moorea/UC_Berkeley_Moorea_Class.html](http://ib.berkeley.edu/moorea/UC_Berkeley_Moorea_Class.html). We will be adding material to the page over the summer--we will notify you by email.

Gump Station Web Site, [http://moorea.berkeley.edu](http://moorea.berkeley.edu). This is the best place to look for general information about Moorea and travel.

Student papers from all past years are available on permanent reserve in the library in VLSB. The 2006 paper are online at: [http://repositories.cdlib.org/wrca/moorea/](http://repositories.cdlib.org/wrca/moorea/) and we hope to get 2007 and 2008 online soon also.

**Important Class Dates for 2009 (** = tentative):**

May 7:  Non-refundable deposit of $500 due; check made out to "UC Regents" and given to Brent Mishler.

May 14:  Research permit application due to Brent (email of PDF).  See below.

Aug 26:  Wednesday, class begins in Berkeley, 3059 VLSB; lectures, workshops 9 am - 12 noon every day and 1-4 pm most days.  Each meeting is important, so we expect full attendance.

Sept. 11-12:  Travel to Moorea, arrive at Gump Station no later than 5pm on Sept 13.

Sept. 13:  Sunday evening, first function at Gump Research Station on Moorea

Sept. 14:  Bright and early Monday, begin class activities with a tour around the island...

*Oct. 1:  ••• Remainder of class fees due, $4,100, due through CARS •••

Nov. 14:  Saturday, class finishes in Moorea: clean-up station.  Preliminary draft of complete paper due (draft sections will have been due earlier).

Nov 15-22:  Week for independent travel and study -- you must leave Gump Station on 11/15, but many like to stay in French Polynesia and tour other islands.  A good time to have parents or significant other visit (NB, we strongly discourage this during the class time).  Otherwise, come back to Berkeley and get a head start on your project completion!

Nov 23-29:  Thanksgiving week.  No class, but work as needed on completion of project, report, and presentation.

Nov. 30:  Monday, required class meeting in Berkeley 3059 VLSB at 9 AM.

Nov. 30 - Dec. 9:  Intensive work finishing up project: consult with faculty on campus, statistics, use labs and/or libraries, etc. as needed.  Prepare Powerpoint and improve your paper draft; format paper.  Workshops will be given in these areas.
*Dec. 10:* Class mini-symposium--project presentations in 15-minute slots all day.

Dec. 17: **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. 19: Semester ends; grades available.

**Money matters**

Anticipated costs of the course will be approximately $4,600 for housing, food, lab/field materials, in-country travel (after you reach the Gump Station up until the end of the Moorea part of the course in November), and materials fee. We will give you an update on fees in mid-summer. The $500 deposit is part of this $4,600, so you will need to pay the remaining $4,100 through CARS approximately on October 1. You will also be responsible for the round trip airfare from the Bay Area to Tahiti (airfares may vary significantly depending on time of purchase and itinerary -- start looking soon!). See the Gump Station website for travel information and/or talk to your own travel agent. *Financial assistance is available for qualified students through the Financial Aid Office, 211 Sproul Hall. Students currently on financial aid can have their fall budgets and allocations adjusted to reflect these additional costs; please see your financial aid counselors about this and/or talk to us.*

Items that are not covered in these fees include your entertainment, special dietary needs or wants, alcoholic beverages, trinkets and gifts, private travel, recreation, personal toiletries, soap, and other personal items.

**Visa and Research Permit**

Regulations are currently in flux, but it is likely you will need a visa. To stay longer than 30 days a short term visa has been required for all (including Canadians) except nationals of Australia and EU. You will responsible for getting your own visa, if needed, for which you will need to take many items including passport, financial guarantees, proof of health insurance, etc., as well as your research permit (see below) into the French Consulate. The Gump Station maintains a web page with current rules: [http://moorea.berkeley.edu/travel/visa-requirements](http://moorea.berkeley.edu/travel/visa-requirements). Watch that site for updates, we will also email visa details over the summer once those are clear.

You must have a passport valid for six months beyond the last day in French Polynesia. If yours is about to expire, renew immediately! You will need it ahead of time for purposes of getting a visa.

You also need to apply for an individual research permit; you'll need this to get a visa and get into the country. There is a two-page form to be filled out electronically (including a passport-like photo); Brent will email you the blank form. You need to get him a PDF by **May 14th at the latest**, so they can all go together with the general class permit application to Gump Station, which will arrange make arrangements for us with the government, then send us the approved permits.
**Health Information**

As for health concerns, you do not need any special shots or other preventive measures. French Polynesia is quite civilized, with French doctors. There is a small hospital on Moorea and a large one over in Papeete. Dengue fever is present, but avoiding mosquitoes is the best deterrent. As for traveling in any tropical area, you might want to bring along a small personal first aid kit that includes aspirin, sudafed, immodium or Pepto-Bismol, band-aids, calamine lotion, and aloe cream. You might want to bring mosquito repellent (whatever works for you), though they have very good repellents down there. Everyone must have some form of health insurance, which you will also need for your visa, and you should be sure it covers emergency medical evacuation. More information will be given later.

**Water Skills**

Everyone will be expected to participate in exercises in the lagoon. Swimming skills are essential and snorkeling is desirable. A swimming test and snorkeling lesson will be required in the fall. You should practice snorkeling in the ocean or pool so that you are comfortable with the gear. For this class and for Moorea everyone will be expected to have her/his own mask, fins and snorkel, as well as diving booties and gloves (gardening gloves do just fine). We recommend getting a good solid pair of booties for walking around on the reef, etc. These items can all be purchased around the Bay area, but if you have them already don’t forget to bring them in the Fall. Again, more info about this will be discussed at the beginning of the semester.

Scuba diving at the Gump Station is possible only for UC-certified scientific divers. Others may not dive using the Gump Station, even if you have other kinds of certification. However, anyone can arrange to dive with one of the private companies on the island in their free time.

**General Supplies:**

- loose fitting clothing
- bathing suit
- insect repellent
- sunblock/sunscreen
- shorts with pockets (for carrying items)
- waterproof notebook (will discuss this in class)
- good raincoat
- warm jacket or something warm
- snorkeling equipment (see above)
- 10x hand lens
- personal first aid supplies
- good walking shoes
- army knife (but not in your carry on bag)
- water bottle
- hat with broad brim all around
- sunglasses
- camera
- flashlight
- daypack
- guitar, frisbee, ...

Remember that everything is much more expensive on Moorea, so it is best to bring all your personal items for the duration of your stay. You can buy almost anything you need there, but it will require money or ATM/credit card.

You are allowed two bags by the airlines, but we request that everyone help with transport of class supplies and equipment. So you should pack light and expect to carry up to 10 lbs of class materials (common items are copy paper, microscopes, ziplock bags, sampling equipment, food items) in one of your bags.
Bring your own laptop computer!

The Gump Station has a DSL network that can be accessed with a standard ethernet cord or wireless (wifi). Because you will be writing reports, accessing information on the net, and analyzing data for this course, there will be significant computer use. You will find it essential to have your own. Let us know if this causes a financial problem for you.

Course Texts
We will use these two required texts, which are now in stock in the ASUC store. You may want to look at over the summer:

1. Lonely Planet Guide to Tahiti and French Polynesia, 7th ed. (Blond)
2. Handbook of Biological Investigation, 7th ed. (Ambrose et al.)

Other Summer Reading & Preparation
See the separate handout we have prepared for you (or visit http://ib.berkeley.edu/moorea/Moorea_Course_Readings_2009.pdf). Things will be busy in the Fall; this summer would be a relaxed time to prepare yourself for paradise with general readings and watching some version of Mutiny on the Bounty!

Grading

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<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Exam on lecture material</td>
<td>10%</td>
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<tr>
<td>Field exercises (2); field notes</td>
<td>20%</td>
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<tr>
<td>Project</td>
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<td>Proposal, drafts, all on time</td>
<td>5%</td>
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<tr>
<td>Symposium presentation</td>
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<tr>
<td>Final paper</td>
<td>45%</td>
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<tr>
<td>Project total</td>
<td>60%</td>
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<tr>
<td>Participation (active buddy, good citizen, station rules)</td>
<td>10%</td>
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Gump Station Rules

The Station rules are available on the web and will be handed out for you to sign in the fall. Also, remember that in a foreign country you are ambassadors for Berkeley and the US, and you must behave accordingly. We do need to emphasize the importance of these rules, which are based on common sense. The station has the authority to send disruptive students home at anytime. The local authorities are also quick to take action on legal matters, which at a minimum would be expulsion from French Polynesia. We want to particularly underline the prohibition against illegal drugs. You must not transport, purchase, sell, or use them; doing so would jeopardize more than just your future, it would endanger the future of this class and the station. The professors, the station, and the local authorities, must be very strict on this issue.

The Risks of International Education

French Polynesia is a remote, foreign country with a non-English official language. As a result, living in French Polynesia entails some risk, including, but not limited to, potential problems with rapid access to health care, dangers associated with roads, vehicles, and traffic signs, dangers associated with beaches, shores, boat use, and water activities, dangers associated with trails and forests. While most of these risks are no greater than one would face in California, one must ALWAYS be careful and USE common sense. Each student must remember that she/he takes full responsibility for their actions.