

Madison Area Technical College and Solar Energy International
Renewable Energy for International Development
Frequently Asked Questions
Rancho Mastatal, Costa Rica
January, 2012

We're excited to have you join MATC and Solar Energy International for the Renewable Energy for International Development class held in Mastatal, Costa Rica. This document will provide you with answers to frequently asked questions that we hope will make your trip comfortable and easy.

Where are we going?

Mastatal is a rural village roughly 2.5 hours (by bus) southwest of Costa Rica's capital city, San Jose (See Figure 1 below). Mastatal has a population of roughly 150 residents, most of whom are low income agricultural workers, whose income derives from coffee and cocoa cultivation and/or small scale livestock operations (chickens, hogs, and cattle). The primary source of energy for most residents is firewood, which is used both as source of light, heat, and for cooking fuel. Wood is regularly cut from nearby forests and unfortunately this often includes the nearby La Cangreja National Park. Solar Energy International has been conducting renewable energy workshops in Mastatal since 2004, and there are currently several solar electric and other renewable energy systems operating in the village as a result of previous work done in the area. Residents are still in great need of additional energy projects, and this location provides an excellent site for MATC students to become engaged in service learning experiences.

Figure 1. Map of Costa Rica and Geographic Location of Mastatal



Telephone access

There is a single public telephone located in the village of Mastatal. Rancho Mastatal also has a cell phone for emergencies. A cell phone tower has recently been added in the village and some cell phones might work with the ICE service depending on your carrier and international plan (however be forewarned that international rates can be VERY expensive). Trip leaders will carry both international cell phones and multiple radio walkie-talkies during the trip for communication purposes and in case of emergency.

Internet access

As of 2009, there is a small informal internet café in Rancho Mastatal. The café has three computers that are available from noon to 8pm daily. Cost is roughly \$1-2 per hour.

Money and Banks

The Costa Rican currency is the colon. Money must be changed either at the airport or at a bank in San Jose (there are no banks or ATM machines in Mastatal or Puriscal, and traveler's checks are generally not accepted in these and other small towns). Trip leaders and students will need to exchange money while in the U.S. or in San Jose. Note that the payment to Rancho Mastatal includes all lodging and food. Participants only need carry enough money to cover incidental expenses (food, drinks, souvenirs, etc.). Trip leaders will carry additional local currency in case of emergency.

Medical Attention

The closest health clinic to Mastatal is approximately 45 minutes by car and 1 hour by bus. The closest 24-hour clinic is found in Puriscal, about 1 1/2 hours by car and 2 hours by bus from Mastatal. Hospitals are in San Jose, about 2 1/2 hours away by car. Public hospitals in Costa Rica provide free basic medical services to foreigners, and Costa Rica is generally regarded as having one of the best medical systems in Latin America. All students participating in the trip will be required to show proof of medical insurance, and to purchase a supplemental international traveler's insurance policy that provides for advanced medical care abroad and emergency evacuation to the United States.

Language & culture

Costa Rica is a Spanish speaking country. However, in many places you will find people who speak some or plenty of English, and it is quite possible to get along with minimal Spanish. The people are used to tourists, and are very helpful. We recommend that you invest some time in learning at least some basic Spanish to facilitate your journey, and out of respect for the local people. Lonely Planet's Costa Rica Spanish Phrasebook is an excellent, inexpensive introduction to the language. Instruction at Rancho Mastatal will be taught in English, with Spanish translation for local participants.

Ticos, as Costa Ricans are often called, are generally easy-going, open, helpful, and fun people. The country's tranquil nature shows through in all aspects of the culture. Since 1949, the country has been without any armed forces. Costa Rica, despite its relatively small size, has an incredibly diverse geography. A series of volcanic mountain chains run down the center of the country. The highest point is Cerro Chirripó, which reaches 3,820

meters high, rivaling some of the taller mountains in the United States. The variety of flora and fauna found throughout the country is remarkable for a country so small. It is a nature lover's paradise. Though not quite as "advanced" as the United States, Costa Ricans enjoy a life expectancy similar to that of Americans, perhaps a result of a more laid back lifestyle, and a healthy dose of fish, rice, and beans.

Rancho Mastatal

Rancho Mastatal is an environmental learning and sustainable living center, retreat, and lodge located in the last virgin rainforest of Costa Rica's Puriscal County. Rancho Mastatal practices and promotes living responsibly in the tropics, while educating its visitors about the significance and majesty of the world's disappearing tropical forests. The site encompasses 500+ acres of picture-perfect waterfalls, crystal-clear rivers, and impressive trees in the transition zone between very wet and pre-montane rainforest in one of Costa Rica's most undiscovered regions. The property shares a significant border with the splendid La Cangreja National Park, a protected area providing habitat for a number of endangered animals and flora, and containing some 2,000 plant species and varied fauna. Rancho Mastatal maintains 19-kilometers of rainforest trails, connecting to a network of footpaths in La Cangreja.

On site and in the community, the Rancho Mastatal crew builds using natural techniques, including the use of bamboo and cob, and supports the use of renewable energy systems. In their ongoing commitment to education and instruction, they organize and sponsor a wide array of workshops including alternative design and construction to Wilderness First Response Certification. Rancho Mastatal's work with schools in both the United States and Costa Rica offers customized educational programs on rainforest ecology, Latin culture, and Spanish and English as a second language. Rancho Mastatal welcomes volunteers, graduate students, interns, and all others in search of a memorable and unique tropical experience.

Our schedule is designed to give you time to enjoy the beautiful surroundings and people of Mastatal. The schedule will include a two-hour lunch/siesta/ swimming break in the middle of each day. One full day of the class will also be dedicated for recreational and/or cultural field trips in the area. Past groups have experienced an educational, exciting, and inspiring time while having fun with a great group of people.

Your workshop fee includes in-country transportation (tour bus) to Rancho Mastatal, a dorm bed, and all meals (meals are primarily vegetarian, and include numerous fresh tropical fruits and vegetables and sumptuous). Solar hot water showers and laundry facilities are available on site. Private room accommodations may be available at additional cost – please contact us early to make special arrangements. Additional information on the lodging accommodations is available at: www.rancho mastatal.com

Homestays

We can arrange for you to stay with a local family for 1-2 nights during the middle of your visit at an additional cost of \$10 per night. Rancho Mastatal works with a number of local families to offer homestay opportunities for those that want to see, firsthand, how

the wonderful people of Mastatal live. Students taking advantage of this opportunity have the chance to work on their Spanish, eat traditional "tico" cuisine, and live, at least for a few days, as the locals do. This is an incredible chance to participate in a cultural exchange, while helping a local family to generate some additional income.

Accommodations are comfortable, yet more rustic than at the Ranch. Students interested in this opportunity would eat dinner, sleep and eat breakfast with their host families before coming to the Ranch at approximately 8:30 a.m. for the beginning of class. Please let us know if you would like us to arrange a homestay for you as part of your experience in Mastatal. We will do our best to accommodate your requests at the time of booking.

What should I Wear & Bring?

Mastatal in January will be warm and humid. Although this is the "dry" season, rains still occur at times in the afternoon. We recommend traveling as lightly as possible. Resist the temptation to bring everything you think you might possibly need. In the tropical climate, darker clothes will make you hot and attract bugs. Long sleeved shirts and pants are recommended for sun, insect protection, and evening use. Select clothes that will dry easily (avoid jeans and cotton shirts). Bring a good hat to shade your eyes and head (sunburned scalps are very painful). You will be in a tropical forest, and we will be doing physical work, so make sure you bring a pair of shoes that you don't mind getting dirty. A pair of rugged sandals or sport shoes that dry easily are useful for wading in water. Work gloves may come in handy for our projects. And, of course, Bring plenty of underclothes.

There is a hand-wash laundry facility at Rancho Mastatal, and laundry service is also available (US\$0.30 per piece). This should allow you to pack somewhat fewer clothing items, and lighten the load that you must carry.

In general, we recommend that you carry your gear in a large, internal frame backpack. It's less tiresome to carry your load on your back, although you have to be aware when in crowded places. Make sure that you chose a good quality pack that won't rip, break or become damaged in any way as it may get "tested." Alternatively, wheeled luggage will be useful for navigating through airports, however you will need to carry it by hand once in Mastatal, where there are only dirt roads and foot paths.

Here is a list of smaller items that you may find useful:

- Small flashlight or headlamp with spare batteries (rechargeable)
- Travel alarm clock or watch
- Leatherman tool or Swiss Army-style pocketknife
- A section of cord or line (clothesline or for a thousand other purposes)
- Swimsuit and towel
- Sunglasses and hat (the sun is very strong)
- Toiletries (use soaps, shampoos and toothpastes that are biodegradable)
- Sunblock (don't skimp on sunblock)
- Insect repellent
- Water bottles

- First-aid kit
- Lightweight clothes (avoid denim and cotton which do not dry easily)
- Rain gear
- Camera
- Tevas, Keens, Chaco's or similar wet/dry sandals or water shoes
- Spanish pocket dictionary or phrasebook
- Prescription and over the counter medicines
- Small daypack or fanny pack for hiking

What travel arrangements do I need to make?

For this workshop, we will be meeting and traveling as a group once participants arrive in San Jose, Costa Rica. You will need to make your own arrangements to fly into the Juan Santamaría International Airport in Alajuela (the primary international airport in Costa Rica), approximately 17 kilometers west of San José. More details on travel and rendezvous arrangements will be provided upon official enrollment in the course.

What is the agenda for the class?

A tentative agenda for the study abroad portion of the course would look as follows:

Day 1: Participants arrive at Juan Santamaría International Airport in Alajuela
 Charter Bus to Mastatal (arrive in the evening)
 Course overview, goals and objectives, review of class agenda

Day 2: Introduction to Mastatal – Culture, Climate, Safety, Policy Review
 Meet with local residents and discuss community energy needs
 Survey of existing energy infrastructure
 Inspections of previous local renewable energy installations
 Evening session on basic electronics

Day 3: Site Assessments for renewable energy systems installation
 Basic PV class instruction
 Begin system component selection and pre-assembly
 Evening lighting lab experiments

Day 4: Design and Installation of renewable energy systems
 Basic PV class instruction
 First RE system installation

Day 5: Tour day to visit local ecological sites
 (National Park, Mtn Rainforest, Pacific Coast)
 Overnight home stays with local residents

Day 6: Design and Installation of renewable energy systems
 Basic PV class instruction continued
 Second RE system Installation
 Overnight home stays with local residents

Day 7: Design and Installation of renewable energy systems

- PV maintenance class instruction
- Third RE system installation
- Evening Panel Discussion on Technology transfer

Day 8: Completion of remaining installation tasks

- Fourth RE system installation
- Debriefing on work accomplished
- Brainstorming for future installation projects
- Organization for early morning departure from Mastatal
- Evening dinner and social gathering with residents and hosts

Day 9: Charter Bus from Mastatal to San Jose (depart early morning)

- Depart from Juan Santamaría International Airport in Alajuela

Are Financial Aid funds available?

Possibly. This depends on your individual financial status. In many cases, additional financial aid awards can be made to support study abroad courses. Numerous local organizations also have scholarships available to support study abroad. Contact MATC's international study office and your financial aid officer to make further inquiries.

Are GI Bill funds available?

Possibly. This depends on your individual financial status. In many cases, additional financial aid awards can be made to support study abroad courses. Contact MATC's international study office and your VA officer to make further inquiries.

How do I enroll in the class?

A limited number of spaces are available in the class. So you are encouraged to register early. To register for the class, please contact:

MATC International Study Office

Phone: (608) 243-4461

Email: StudyAbroad@MATCmadison.edu

For Further Information about the course please contact:

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