

Sustainable Design and Development in Benin
Summer 2014



Location: Porto-Novo, Benin

Program description: Sustainable Design and Development in Benin is designed as a vigorous academic program that addresses learning through experiential travel, study and on-line learning. Students must complete two courses: ENGR 411 – Fundamentals of Sustainable Engineering and Design and ENGR 480: Field Studies in International Sustainable Development. Students will work closely with WATER for Africa, a 501 c.3. nonprofit organization (www.water-dr.org). WATER is an acronym for West Africa: Technology, Education, and Reciprocity. Water also describes our particular interest in water-related health issues, although we also address broader health and quality of life issues that have their origins in social and environmental conditions. Student service learning projects are designed to help the citizens of Benin and other countries in west Africa have clean drinking water. We also support sustainable technical, engineering, education, and health projects that advance health and overall quality of life in Benin and other west African countries by improving social and environmental conditions and promoting awareness and education.

Location Description: Benin is a country that is representative of much of sub-Saharan Africa. In this West African country of approximately 8.5 million people, nearly a third of the population lacks access to potable water. Contaminated water, lack of infrastructure and limited access to health care are hurdles that must be overcome in Benin and throughout the region in order to meet the targets set by United Nations Millennium Development Goals. Trained individuals are needed that understand participatory development and have the technical skills to address complex development issues.



The Songhai Center is a United Nations Center of Excellence - a model of sustainable development that is being replicated in 17 countries throughout Africa. The vision of the Songhai Center is to establish an entrepreneurial platform of integrated development, an enabling environment to find social, economic, technical, and organizational solutions that will take Africans out of poverty, pulling them towards autonomy and sustainable socioeconomic development. Dr. Striebig has been working with Father Nzamujo Godfrey, director of SC, to implement point-of-use water treatment technology since 2004.

Centre Afrika Obota (C.A.O.) is a non-profit, non-governmental organization that aims to contribute to African unity and development through research and indigenous resource mobilization, education, promotion of democracy and human rights at the grassroots, solidarity and panafricanism. Gonzaga University and James Madison University have worked with CAO on improving resources at CAO organized health clinics. In 2010, these organizations helped to install palm oil machinery in the village of Houezounme Kpevi. This support, in the words of project manager, Marino de Souza, "will bring a revolution in development, allowing women in the work cooperative to afford school and health care for their children." The proposed project will illustrate the work of Centre Afrika Obota (CAO). CAO social workers and development specialists work with rural villages to help provide access to education, financial planning, and appropriate technologies.

Benin has a rich cultural history that includes west African music, voodoo, and was a center of the colonial slave trade. Benin's beauty, culture, history and leadership in sustainable development make it an ideal place to study the contextual issues associated with sustainable development.

**Director**

Bradley Striebig, Professor of Engineering, James Madison University

Instructors

Adebayo Ogundipe, Assistant Professor of Engineering, James Madison University

Sheridan Jones, Registered Nurse

Accommodations: Accommodations will be provided for through residence halls/dormitories, with two meals per day included in the program fee.

Additional Items to Consider: Students will participate in coursework and project development during the earlier part of the summer. The projects developed will be implemented at the Songhai Center, a United Nations Center of Excellence for Sustainable Development. While at Songhai, students will interact with staff from various NGOs.

Accommodations, lodging, board and transportation will be provided by the Songhai Center. The Songhai Center also houses one of the fastest internet Cafe [in Benin](#), for communication.

Visas are required.

Medicine or vaccines for malaria, yellow fever, and other CDC guidelines must be followed for travel to Benin. It is recommended that you follow the CDC travel guidelines in consultation with your physician.

This program is best intended for environmental science, engineering, and ISAT students, but all majors are welcome to apply and project work will be directed towards students, competencies, strengths and interests.

Students will be expected to work closely with people of another culture.

CHEM 131 is a prerequisite for the program

Passports

If you do not have a passport, apply for one NOW. It could take 6-8 weeks to get a passport and you will not be able to book travel or get a visa until you have one.

If you have a passport, check the expiration date. If your passport will expire before January 2015, you need to renew it. Do this NOW, as it may take 6-8 weeks. You will be able to book travel by giving the travel agent your passport number, but you will not be able to get a visa until you have “current” passport.



Making travel arrangements: You are responsible for making your own flight reservations. This should be done as soon as possible. (Faculty will be booking their travel ASAP.) You may choose your own routing to Cotonou, Benin; however, we **strongly recommend** that you fly on the same flight with your faculty, as this means less waiting in a hot, crowded African airport.

Flight information – TBD Soon

Spring break is a great time to get your travel immunizations. Please try to get these taken care of. Check www.cdc.gov/travel/destination/benin.aspx for the complete list. You will need to be current on all routine vaccines. You also should be vaccinated for hepatitis A and B, meningitis, and typhoid. Be sure your polio and DPT vaccination status is current. You are **REQUIRED** to be vaccinated against yellow fever and will need to show your yellow fever card to enter the country. You also will not be able to get a visa without a yellow fever card. Most county health departments have a clinic where you can get these immunizations.

VISA Applications require the following with you so that we can submit your visa and ID card applications for you:

- ✓ 3 passport size photos
- ✓ Your passport
- ✓ Your yellow fever card
- ✓ Completed forms
- ✓ Money Order or Cashier Check for \$140 for Benin visa fee. This should be made payable to the Embassy of the Republic of Benin



Packing List

Things to keep in mind as you pack –

1. Benin is hot and humid – you will sweat a LOT!
2. You can do some laundry in your bathroom sink – light weight clothes dry pretty quickly; cotton t-shirts and socks take a bit longer.
3. It is culturally appropriate to dress conservatively (for women, low necklines, exposed shoulders and thighs are taboo). This will also protect you from mosquitoes and scrapes, etc.
4. You don't need to make a fashion statement, but we all will be judged by our appearances. We need to be neat and relatively clean. Remember that we really are ambassadors. In fact, Songhai Centre identifies us as "delegates."
5. You can check 2 bags, each weighing 50 pounds, on your international flight. Any domestic connecting flights should defer to this rather than their own more limited restriction.
6. There are advantages to trying to pack everything in carry-on luggage. In your carry-on, do be sure to pack a change of clothes. If your luggage gets delayed, you may not get it 3-4 days.



What to bring

- ☐ Rain jacket (you can buy a poncho at the dollar store....)
- ☐ Sun hat, sunglasses, sun block
- ☐ Bandana – a great fashion accessory to dress up those t-shirts(!), but it also feels great around your neck as a cooling device after you soak it in cold water and can be used as a sweatband or to tie back your hair, too!
- ☐ Long lightweight pants (or convertibles) – probably 2 pairs are enough; 3 is “nice.”
- ☐ One pair of capris or longer (knee-length) shorts for “tourist days”
- ☐ A nicer outfit for going to church and teaching days (clean pants and button or polo shirt for guys, skirt and top for women). Note: some female students find it more comfortable to wear skirts than slacks..
- ☐ t-shirts. I probably go overboard on this, but really like to be able to wear a fresh t-shirt each day. I’d bring at least 4-5. These need to cover your shoulders and have modest necklines.
- ☐ Long sleeve shirt to wear in the evenings (mosquitoes!). Also can be used as a lightweight jacket.
- ☐ Underwear & PJs,
- ☐ socks. I find socks harder to wash and dry so bring a pair for each day.
- ☐ Shoes – wear one pair and pack another. Open-toed shoes/sandals are not good – it’s dusty and streets are very uneven. Something like Keens with covered toes are great!
- ☐ Flip-flops to wear in the shower.
- ☐ Moneybelt or travel pouch
- ☐ toiletries, hygiene items, prescriptions, toothpaste
- ☐ adaptors and converter for electric items, rechargeable batteries and charger
- ☐ Camera, extra memory card, battery charger
- ☐ Electronic tablet or smart phone & charger
- ☐ 1-2 water bottles (for preparing your drinking water),
- ☐ insect repellant,
- ☐ flashlight or headlamp,
- ☐ kleenex, small first-aid kit.
- ☐ Be sure any prescription meds are in their original container.
- ☐ Don’t forget your hand sanitizer!
- ☐ Water purifier – such as a steri-pen. We will supply one for each room.
- ☐ Snacks (drink mix, peanut butter, granola bars for travel days),
- ☐ travel pillow, The “pillows” at Songhai Centre are rock-hard. I bring a cheap one and leave it behind.
- ☐ washcloth, towel. We will be provided with towels – but they are thin and washcloths are invisible in Benin. I bring an extra set of cheap towels with me and leave them behind.
- ☐ You will share a room and may end up sharing a bed. You might want to consider bringing along a “sleep sack.”

Packing tip – I’d suggest packing a change of clothes and essentials in a carry-on bag. If your luggage gets “lost” en-route, it likely will be 5 days or so before it catches up with you.



CODE OF CONDUCT

Conduct expectations can simply be summarized as “Don’t be stupid!” Here’s a starting point for our conversation about group conduct expectations.

- ✓ Remember that you are a JMU ambassador.
- ✓ Dress in a culturally appropriate manner that also will safeguard you against hazards like mosquitoes and cuts and scrapes.
- ✓ Using hand sanitizer is good practice. But use some common sense about this – please don’t be like the student two years ago who used it immediately after shaking hands with anyone (in their presence).
- ✓ Use the buddy system. You should not be wandering around outside the Songhai Centre alone. Also, when you leave the Centre to explore the neighborhood, be sure you tell someone (preferably one of the instructors) where you are going and when you plan to be back.
- ✓ If you think you are ill, let one of your instructors know.
- ✓ Be on time for meals – we will not arrange late meals if you miss one and will not ask our friends at Songhai Centre to hang around and wait on you – they have families they want to get home to.
- ✓ Be on time for bus departures, etc.
- ✓ Use your (good) judgment about alcohol. Overdoing is just stupid and is culturally inappropriate. Alcohol also is dehydrating – and you will have plenty of issues with that anyway! Remember that for every bottle of beer you drink, you need to drink a liter of water.
- ✓ ABSOLUTELY NO RIDING OR DRIVING MOTOR SCOOTERS. THIS WILL RESULT IN AN AUTOMATIC “F” FOR THE COURSE.
- ✓ Participate in all group activities. Take advantage of opportunities for informal interactions with the students and staff at Songhai Centre. Embrace ambiguity!