



The past few months have been extremely busy for the Engineering for Developing Communities faculty and staff. The program's first-ever Annual Report of Activities was published, and is available online at http://www.edc-cu.org/pdf/2004-2005_EDC_Annual_Report.pdf.

Education

The Civil, Environmental and Architectural Engineering (CEAE) Department's Curriculum Committee met on September 8 to discuss approval of the proposed undergraduate certificate in EDC. The goal is to have all required approvals (by this committee, as well as the CEAE department faculty and the College undergraduate education committee in time for spring 2006 advising week in late October.) Watch the website for the latest developments.

Two new courses are underway this semester: Engineering for the Developing World and Appropriate Treatment Technologies. These courses complete the list of offerings required to earn the M.S. environmental engineering degree with an EDC focus.

Faculty

Angie Bielefeldt has embarked on her year-long sabbatical, but will continue to participate in EDC program development during that time. Scott Summers delayed his planned sabbatical in order to teach the new course on Appropriate Treatment Technologies. The course will focus on sanitation, water treatment and wastewater treatment for developing communities. It is intended for 2nd year grad students who have had a course in water and/or wastewater treatment, and will include lectures, outside seminar speakers and case studies. It is a required course in the Engineering for Developing Communities (EDC) - MS Program. Bernard Amadei is teaching an appropriate technology section of the college's Freshman Engineering Projects course, as well as the newly developed Engineering for the Developing World (undergraduate senior design course).

Outreach/Services/Projects

FLAST

Our Field Lab for Applied Sustainable Technologies (FLAST, <http://www.edc-cu.org/FLASTlab.htm>) continues to be used in many ways.

- The Colorado Straw Bale Association (COSBA) held a 2-day workshop at our outdoor facility on July 30-31, 2005. Twelve people spent two full days rebuilding the straw bale walls and then learning about different types of earth plasters. Sustainability and the Built Environment (spring 2005) co-instructors Mark Schueneman and Dan Chiras led this workshop.
- Two faculty members (Bernard Amadei and Jana Milford, Mechanical Engineering) who are teaching Appropriate Technology sections of the Freshman Engineering Projects course during fall semester plan to use the outdoor lab as part of their learning environment. For more details on Bernard's section of this course, see the website at <http://www.edc-cu.org/geen1400.htm>.
- The Center for Resource Conservation will be offering a wide variety of activities as part of Solar Week. An all-day in-depth look at PV for the home with an instructor from Solar Energy International will include a tour of the FLAST.

EDC Faculty

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EDC Staff

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Sustainable Nations Training

The Sustainable Nations Training held at Pine Ridge Reservation in August allowed the EDC program coordinator Robyn Sandekian to make contacts with many local organizations that could be future collaborators. For complete details about the training visit <http://www.edc-cu.org/SustainableNationsTraining.htm>.

EWB-CU Chapter Projects

Several EWB-CU teams traveled abroad and returned safely from project trips this summer.

The Rwanda team was composed of University of Colorado at Boulder engineering students Max Gold, Keir Hart, Laura Richards, Evan Thomas and Meg VanSciver (also EWB-USA Project Coordinator) along with professional engineers Dr. Edward Winant of the University of West Virginia and Heather Paul of the NASA-Johnson Space Center. For one week of the two week trip, EWB-USA Founder Dr. Bernard Amadei, Professor Jim Stone of the South Dakota School of Mines and Prosper Ndabishuriye representing Teachers Without Borders joined the group in Muramba. (Information from trip report submitted to EWB-USA)



This July the EWB Nicaragua team, including CU students Lindsay Holden, Pablo Cornejo-Warner and Chris Valenti, made their first journey to Dario, Nicaragua to perform an assessment trip. EWB team members partnered with a local non-governmental organization, El Porvenir, that puts a large emphasis on community involvement and sustainable development. Working with El Porvenir, CU students built a community wash station and participated in reforestation projects in the community of Ojo de Agua Hispangual. The CU EWB team also did a community assessment, including testing the community water sources and implementing a community questionnaire. Along with collecting useful data, the EWB Nicaragua team formed valuable relationships with El Porvenir and people in the community of Ojo de Agua Hispangual. (Information submitted by Christopher Valenti.)

Peru team members Juan Jose Rivera, David Dani and Andrew Azman traveled in late July to early August. More information will be available about their trip in the near future.

The Haiti bridge project will be completed this fall, thus ending EWB-CU's participation in the project.

In academic year 2005-2006, EWB-CU projects will focus on Rwanda and Peru.

Future Projects

Initial discussions are also underway for EDC and COSBA to work with a group in Ciudad Juárez, Mexico this fall. We are also in the early development stages of a distance education collaboration with the University of Kabul (Afghanistan) School of Engineering.

Research

Research work on the Filtrón point-of-use water purification pot continues. An EPA funded grant, "Sustainability of the Filtrón for Microbial Disinfection," will continue throughout the academic year. Scott Summers is working with students Jay Shah and Pablo Cornejo-Warner on this research. In addition, Bernard Amadei is working with Evan Thomas, completing his P3 funded research on developing "A Sustainable, Smart Growth Plan for Muramba, Rwanda."

Advisory Boards Will Meet in October

The second meeting of our advisory boards will be on Thursday, October 6, 2005. During that meeting, the EDC faculty and staff plan to solicit ideas for future growth opportunities within our program.