

2009 EWB-USA Mountain Regional Workshop Speaker and Session Information

Session Title	Presenter	Description
NAU Chapter Ghana Project	Connor Rickett , President NAU Chapter of EWB-USA and NAU Master's Student in Microbiology	The NAU Chapter of EWB-USA presents their implementation project from the summer of 2009, building a new medical clinic and nurses' quarters in Yua, Ghana
Key Note Address	David Munoz, Ph.D , Director of the Humanitarian Engineering Minor at the Colorado School of Mines	Dr. Munoz has extensive experience with development work and engineering to improve quality of life. The Colorado School of Mines is one of the colleges leading the way in incorporating humanitarian engineering into the larger curriculum.
"EWB Project/Program Process 101"	Colleen O'Holleran , EWB-USA Staff Chapter Relations Manager, Mountain Region and Nevada	How to navigate the process of applying for new projects and programs, deadlines, and reports for assessment and implementation trips
"Designing and Building Simple Solar Powered Systems"	John Campbell , NAU Master's Student in Mechanical Engineering	For those with some basic knowledge of electrical circuits: how to calculate generating capacity needed based on load requirements and how to wire panels together and to components like inverters and charge controllers
"Basic Hydraulics"	Paul Trotta, Ph.D, PE NAU Professor of Civil and Environmental Engineering, and Faculty Advisor to the NAU Chapter	Part I will start in the classroom with the basic equations for determining energy loss in a pipe system, and for fitting system curves to pump curves. The last half of Part I and Part II will include connecting PVC pipe together to build the pipeline, measuring flows and pressures, and comparing measurements to the theoretical values calculated in the classroom. Both sessions should be attended for those on this tract
"Basics of Construction Planning"	David Grider, MA NAU Associate Professor of Construction Management	Part I: How to organize for construction before leaving for the project country. Part II: How to stay organized and prioritize tasks on the project site. Part III: Hands-on skill demonstration to be determined, such as concrete mixing, masonry, or carpentry. Sessions can be attended as one complete tract or as individual modules.
"Preventing Travel and Worksite Illness and Injury"	Allison Clough, MD , NAU Master's Student in Anthropology	A medical doctor with many years of travel medicine experience presents on how to prepare for travel, have an emergency evacuation plan, prevent illness and injury, and stabilize an injured or ill person
"Water Quality Assessment and Treatment"	Ben Moan , NAU Master's Student in Water Resource Engineering and Environmental Chemist	How to use a Hach field kit to measure basic parameters of water quality, and compare sources. How to use a simple gravity filter to remove turbidity
"The Importance of Cultural Understanding"	Panel Discussion: Aaron Denham, Ph.D. NAU Assistant Professor of Anthropology and Faculty Advisor to the NAU Chapter, Cathy Leslie, PE , Executive Director of EWB-USA, and others	What happens if you focus only on the technical aspects of a project and forget to consider the culture? Panelists will discuss a case study and give advice on how to connect with the culture you are working with while illustrating while this is so important. Will be followed by a Q & A
"Preparing for the TAC Presentation"	Peter Waugh, PE , Project Manager for EWB-USA	How to organize and prepare for the EWB Technical Advisory Committee (TAC) presentations prior to assessment and implementation trips.
"Running Effective Meetings"	Jenny Starkey , Public Relations and Events Manager for EWB-USA	How to hold effective club and project meetings, to keep students motivated and organized
"Integrating Engineering and Medical Projects"	Dale Gray , President of Patriot Towers and member of the Phoenix Professionals' Chapter of EWB-USA	Dale has many years of experience doing development work in other countries. Through collaborations with medical doctors and engineers, Dale's work focuses on improving human health
"Elevation Surveying"	John Tingerthal, MSCE, SE, PE NAU Assistant Professor of Civil and Environmental Engineering and Construction Management	Basics of plane surveying and use of equipment
EWB Student Officer's Forum	Facilitate by members of the NAU Chapter	For student chapter presidents and/or other club officers. A round table discussion on topics important to student chapters, such as: recruiting members and maintaining membership, fundraising, and decision making