Engineering for Community
ENGR 490 Section 082
Winter 2006

Objective
To develop intercultural awareness and communication skills, and a deeper understanding of the interrelationships between technological development and human welfare. Interdisciplinary project teams will work in partnership with local and international communities to identify needs and develop sustainable solutions that are appropriate - environmentally, socially and economically.

Motivation
In its Human Development Report 2001, Making New Technologies Work for Human Development, the United Nations Development Programme (UNDP) identified the following serious deprivations in the world:

1 billion people lack access to safe drinking water;
2.2 million people die annually from contaminated drinking water;
2.4 billion people lack access to sanitation;
2.2 million people die annually from indoor air pollution;
11 million children under the age of five die annually from preventable causes.

Given these imperative needs, this course attempts to prepare students for the complexities of local and international community.

Description
Through discussions, lectures, simulations, cross-cultural interactions and personal reflection, students will develop self- and cultural awareness, and the tools, intuition and critical thinking necessary to work responsibly within and across cultures.

Topics Introduced
Cultural Identity, Privilege, and Service
Anthropology and the Importance of Context
Need Identification and Problem Definition
Sustainability, Resources, and Appropriate Technology
Careers in Service

Instructor
William Schultz (schultz@umich.edu)

Location
4:30–6:00 PM T, Th
1512 C. C. Little Building

Credits
3

Open to all undergraduate and graduate students interested in community development! Students from all schools and colleges (i.e. LSA, ENGIN, SNRE, etc.) are encouraged to enroll.

Want to know more? Email <comm_serv_eng @umich.edu> with any questions.