SAVING TREES AND FIGHTING CLIMATE CHANGE: THE ROLE OF WOMEN

FOR STUDENTS INTERESTED IN: SUSTAINABILITY, RURAL DEVELOPMENT, WOMEN’S STUDIES, GEOGRAPHY, ECOLOGY, ENGINEERING, ENERGY/WATER/CLIMATE CHANGE, PUBLIC HEALTH AND DESIGN

COURSE INSTRUCTORS: Prof. H. S. Udaykumar (ush@engineering.uiowa.edu), Prof. MEENA KHANDELWAL (meena-khandelwal@uiowa.edu)

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PARTNER ORGANIZATION: INSTITUTE OF RURAL RESEARCH AND DEVELOPMENT (IRRAD) IN GURGAON, INDIA; CLIMATE HEALERS (CALIFORNIA, USA) AND FOUNDATION FOR ECOLOGICAL SECURITY (ANAND, GUJARAT, INDIA)

COURSE LOCATION: KUMBALGARH WILDLIFE SANCTUARY, RAJASTHAN & MEWAD, HARYANA

The Kumbalgarh Wildlife Sanctuary is a premier wildlife retreat, some 90 kms from Udaipur, the city of lakes in the state of Rajasthan in western India. The region is picturesque and rich in history and culture. Kumbalgarh lies in the foothills of the rugged Aravali mountain range. The sanctuary is famous for its wolves, leopards, hyena, jackal, sloth bear, various species of deer and birds. Tigers can be found in nearby Ranthambhor sanctuary.
COURSE DESCRIPTION (WHAT THIS COURSE OFFERS TO DIFFERENT MAJORS):

- Learn about the delicate balance and interconnectedness of the needs of rural/tribal populations (particularly women) and that of wildlife in a fast-vanishing but vital forest environment.

- Perform a combined energy, ecology, social and economic impact study of human activities in the micro-environment of the Kumbalgarh preserve.

- Help construct and evaluate a solar cooker in two village locations in Rajasthan.

- Learn about the interconnections between forests, water and energy and how this triumvirate affects the sociocultural lives of women and children.

The unique micro-system involves interactions between people, flora and fauna, water resources and sustainable energy production and utilization. The setting for this course (at the forest’s edge) poses many challenges to engineers, social planners, economists, ecologists and others.

An immediate problem is that of solar cookers, which are to be supplied by Climatehealers to the local population. Over the past two years students at the University of Iowa have undertaken to design and construct a solar cooker (the Hawkeye cooker) that will be suitable for use in the villages of Rajasthan. We will be
constructing a prototype and instrumenting it to obtain readings on performance of the cooker. There are a host of cultural, economic and technical issues associated with the solution being considered: solar cookers. Since women perform most tasks related to gathering and using firewood and their lives are deeply intertwined with gathering wood and water, any solution that changes their daily routines must be approached collaboratively with them. It is hoped that ameliorating their energy and water problems will result in positive changes for women, but this is a complex question that requires tools of sociology, anthropology and women’s studies.

Thus, the course will expose students to the unique and challenging aspects of planning for energy alternatives in a rural setting. Students will be exposed to issues of biodiversity, culture, deforestation, land use, alternative energy, global climate change, use of wood burning stoves and its effect on the health of women and children.

**COURSE REQUIREMENTS**

**PRIOR TO DEPARTURE**

- Attend orientation meeting(s).
- Attend three 2-hour Friday afternoon seminars (3-5pm, dates TBA), read and view required materials, and turn in one reflection paper on those materials.

**DURING OUR STAY IN INDIA**

- Attend all planned activities and excursions.
- Attend regular group meetings with the instructor to process experiences.
- Present a summary to local organizers in India.

**AFTER RETURN FROM INDIA**

- Submit a 10-page essay about what you learned (due January 25, 2014)
- Present a group summary with the instructor (under 45 minutes) at a winterim symposium that will take place before the end of February at the University of Iowa

**REQUIRED READINGS**

FILMS/VIDEOS

- *Gandhi*, 1982, directed by Richard Attenborough (190 min.). This film won eight Academy Awards, including Best Picture, Best Director, and Best Actor.

- E2 energy: Energy for a developing world podcast (PBS) at: [http://www.pbs.org/e2/episodes/202_energy_developing_world_trailer.html](http://www.pbs.org/e2/episodes/202_energy_developing_world_trailer.html)

COURSE GRADES

- Grades for the course will be based on the following elements:

  - **20%** attendance at seminars; 20% two reflection papers on required reading and viewing materials.

  - **20%** Active engagement and discussion with fellow students and instructors, our hosts, and the sponsoring organizations

  - **30%** Project (individual or group) report and presentation.

  - **10%** 10-page essay on what you have learned.

FOR MORE INFORMATION:

- go to the INDIA and IOWA (INDIA) Winterim webpage at [http://www.uiowa.edu/~geog/india/](http://www.uiowa.edu/~geog/india/)

- On climate healers: [http://www.climatehealers.org/olddump/home.html](http://www.climatehealers.org/olddump/home.html)

- Contact Professor Udaykumar at ush@engineering.uiowa.edu or stop by his office (2408 SC). Contact Professor Meena Khandelwal or stop by her office (114 MH) to talk about the course.

- For information about financial aid possibilities, go to [http://international.uiowa.edu/study-abroad/funding/financial-aid/iowa-programs.asp](http://international.uiowa.edu/study-abroad/funding/financial-aid/iowa-programs.asp) and click on either “undergraduate scholarships” or “graduate fellowships.”