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TURNING A LIGHT ON: *STUDENT IDEAS AND COLLABORATION SPARKED DURING HOP EVENTS*
BY KALE ROBERTS

As summer drew to a close, students prepared to bid *adieu* to endless beach days and camping trips and shift back into busy mode. For incoming HSU freshmen and transfer students, summer was busy all along attending Humboldt Orientation Program, or HOP, sessions. These required sessions allowed new students to become acquainted with HSU campus community and provided many with their first glimpses at their near-futures. And where there are students wandering, there are Green Campus program coordinators, keeping Green Campus busy all summer long as well.

Green Campus program hosted tabling events -- meeting with over 150 future students and their parents -- at each of the seven HOP sessions. Students met with campus programs, clubs, and administrative offices as a way to explore avenues for involvement.

Various opportunities for student Green Campus involvement this fall include: volunteering for tabling and outreach events to awaken HSU's campus to energy issues, enrolling in GCP's fall energy auditing workshop, organizing an energy art show and design contest, and applying for a credit-earning internship position. All opportunities were heavily promoted at each HOP session.

Perhaps just as important, HSU Green Campus effectively strengthened coalitions with other existing campus environmental groups, including Campus Center for Appropriate Technology (CCAT) and Campus Recycling Program. By collaborating with these groups, outreach goals were maximized and students were met with a more effective reception.



Tabling hard at the last HOP clubs event:

Kale and Jamila, our newest GCP Coordinators, explain energy efficiency, climate change, and the need for a good rain coat at HSU.

GREEN FIGURES

Green Outreach:

GCP added 74 volunteers to our roster from summer outreach events. Many more stopped by our table for energy efficiency information.

Green Savings:

Although no hard savings were achieved during the summer months, GCP coordinators are working on kWh-saving projects for the fall – watch this space!

Green Futures:

- Fall 2008 -

- GCP Presentation at Chico State Sustainability Conference (Nov)
 - Campus Copy Machine Power-down
- GCP Sticker Design Competition
- Educational Tabling
 - Office Energy Auditing



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Work experience .

NEW GREEN CAMPUS INTERNSHIPS: COMBAT CLIMATE CHANGE, EARN ACADEMIC CREDIT, AND GAIN WORK EXPERIENCE!

BY SARAH SCHNEIDER

This fall semester Green Campus at Humboldt State University is offering six energy efficiency internship

opportunities to motivated and enthusiastic Humboldt State students. The creation of these internships is intended to address the always-important need of harnessing a captive group of driven students interested in saving energy at HSU. These internships will also help GC expand our sphere of influence as energy efficiency educators within the campus community, and will aid in fostering ongoing dialogues about the relationship between energy and the environment.

The *Green Campus Energy Efficiency Internships* fully reflect our goal of supporting green workforce development through training, mentoring, and project-based learning; and will thus provide student interns with valuable work experience and knowledge in energy efficiency and energy conservation by the time they complete their term. Hired as unpaid GC interns, students will work alongside GCPCs in one of three areas: **Office energy Audits, Public Relations and Outreach, and Events and Tabling Coordination.** Interns are expected to put in between 6 to 10 hours of work every week and will assist GCPCs in specific energy efficiency projects. At the end of the semester, interns will be given two academic credits based on evaluations made by the GC team.

As an added benefit of offering academic credit and work experience to students and building more awareness about the importance of energy efficiency through these internships, GC hopes to potentially hire one of the interns as a full-time, paid GCPC at the start of the spring 2009 semester.

WATCH FOR:

Free CFLs on the Quad!

Need energy efficient lighting for your home? Come see us on the quad during club tabling events.

We have free compact florescent lights for your office and home – courtesy of Southern California Edison.

Stakeholder's Meeting •9/16, 1-2pm • Goodwin Forum

GCP will be meeting with our stakeholders for an orientation and brainstorming session. Food and Beverages will be served. Please

RSVP to Sarah
Schneider

(sys@@humboldt.edu)
as soon as possible.



LED BREAKTHROUGH: NEW MANUFACTURING TECHNIQUES ARE INCREASING LIGHT OUTPUT

BY JAMILA GHOUL

Light Emitting Diodes (LEDs) are already used worldwide in computers and mobile phones and are several times more efficient than incandescent bulbs and even Compact Fluorescent Lamps (CFLs). Because of the structure and materials used in standard LEDs, they are costly to produce. The high production cost trickles down to the consumer, which greatly reduces the potential applications of this innovative technology.

In the past year researchers believe that they have found a new way of maximizing the amount of light being emitted from the LEDs and creating a low-cost LED that can be enjoyed by everyone. Until recently, LED lights were created on a substrate of sapphire. These sapphire-based LEDs require a separate mirror-like collector to reflect light that would ordinarily be lost. Researchers at Purdue University overcame this problem by developing a means to produce LEDs on low-cost, metal-coated silicon wafers where the silicon substrate has a built-in reflective layer of zirconium nitride.

One third of all electrical power consumed in the United States is from lighting. This new method of producing low-cost LEDs could open up a new door for consumers who would normally not be able to afford to outfit their home or business with LED lighting. This silicon-based process of creating LED's will allow for the 'scaling-up' of production and will therefore reduce the cost to the consumer and hopefully encourage people to invest in this efficient technology.



Let there be light:

Timothy Sands of Purdue University observes the new LED manufacturing technology.

CONTACT US:

www.humboldt.edu/~greenhsu
greencampus@humboldt.edu

Program Coordinators:

Chris Escarcega
 Data Management
cle15@humboldt.edu

Jamila Ghoul
 Outreach
jghoul@gmail.com

Kale Roberts
 Public Relations
buffalocal@hotmail.com

Sarah Schneider
 Team Lead
sys2@humboldt.edu



The Alliance to Save Energy's "Green Campus Program" is funded by the ratepayers of Pacific Gas & Electric. Strategic Energy Innovations is a sub-contractor of the Green Campus Program.

GREENING OUR CAMPUS: AN ENERGY AUDITING WORKSHOP

BY CHRIS ESCARCEGA

HSU Green Campus, in collaboration with HSU Extended Education, Schatz Energy Resource Center, and the Redwood Coast Energy Authority, will be facilitating a hands-on introductory energy auditing workshop geared towards university students. The workshop will cover institutional lighting, basic office energy auditing, computer efficiency, and heating and cooling systems. Please join us for this "boot camp"-style seminar – details can be found below. Questions can be directed to Richard Engel (rae7001@humboldt.edu).

Greening Our Campus: An Introduction to Energy Auditing

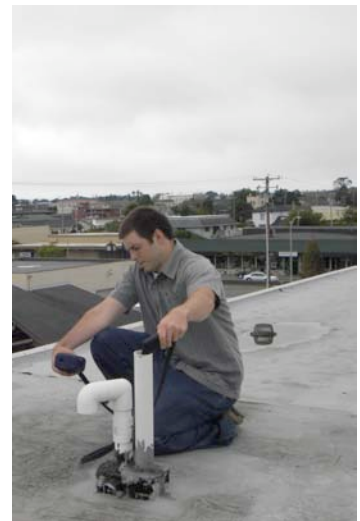
Saturday, Sept. 20, 9am – 5:30pm
 Siemens Hall 115

Instructor: Richard Engel, Research Engineer, Schatz Energy Research Center

Course: EENC 013, CRN 41950

Course for Credit: ENGR 280 (0.5 Unit) CR/NC CRN 43812

Fee: \$25 (\$23 add'l for credit optional)



Combustion Test (Above):

A student conducts a rooftop test of a combustion/ventilation system.



Energy Auditing (left):

Three students observe and measure energy use of a hot water heater.

