# SAVING ENERGY On Campus



# **Summer Sessions UC Berkeley Extension**

1995 University Avenue



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## **Background**

The UC Berkeley Extension building houses one part of a three-unit department that manages summer sessions, study abroad, and Lifelong Learning programs. The two suites that were surveyed have never had previous surveys conducted before, and there is no existing Pulse Dashboard or Kiosk for these offices because they are not on the campus electricity grid. Residents of Suites 118 and 130 in the department occupy this space Monday through Friday from 9am to 5pm. There are about 25 people in Suite 118 and 15 in Suite 130. Deborah Tatto and Devon Howland were the building contacts for this survey and were very passionate about reducing the amount of electricity that is used in these suites. Some concerns that were expressed include lights and computers left on for extended periods of time in vacant rooms, kitchenette appliances left on when not in use, HVAC timing, and the inconvenient placement of light switches on the wall. To address these issues, residents in the suites have formed a Green Team to reduce energy usage and waste.

# WALKTHROUGH OBSERVATIONS & RECOMMENDATIONS

### Lighting

Suite 118 has no access to natural light and many occupants keep overhead lights on throughout the workday. Some utilize the shelf lighting above their desks to supplement the fluorescent overhead lighting, but not many use task lights at their workstations. Lights are often not manually turned off when rooms are unoccupied during the day, and this is largely due to the odd and inconvenient light switch placement on the walls. There are some incandescent light bulbs used in Suite 118, but only in a small lamp in one office. The lights in the copy room of Suite 118 are often left on when no one is in the room.

Suite 130 has much more access to natural light and fewer overhead lights are used during the day. Some suite occupants use task lights at their desks or no lights if sitting next to a window. Many administrators in Suite 130 turn off all lights and computers in their offices when they are not there. The conference room in Suite 130 has access to natural light and lights are turned off when the room is not in use.

All lights are turned off around 7pm by a management system, but security lights remain on throughout the night.

#### **Recommendations**

- □ Utilize natural light as much as possible.
  □ Consider purchasing task lamps as a substitute to overhead lighting; ensure that task lamps are equipped with LED or compact fluorescent bulbs.
  □ Install an occupancy sensor for overhead lighting in Suite 118's copy room.
- ☐ Bring odd switch placement to the attention of occupants in order to raise awareness.

## **Thermal Comfort**

Deborah and Devon reported that the temperature of the building is generally comfortable, although it has been colder lately because of the winter weather. The thermostat turns on from 7am to about 6 pm each day and occupants have control of both thermostats in each of the suites. The temperature in Suite 118 is set to 72°F and 71°F in Suite 130. Because windows cannot be opened in these suites, windows and doors are shut when HVAC is running. Building occupants



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do not use personal fans or space heaters, and air conditioning is not used in these workspaces.

### **Computers/Printers**

Many computers and monitors are left on in both suites when not in use. However, there is some question as to whether or not computers need to be left on for nightly updates. After contacting Campus Shared Services at (510) 664-9000, it was discovered that all computers do in fact need to be kept on (sleep mode is preferable) during the night to receive updates. The servers are located in Warren Hall.

Occupants do not use screen savers, which is very good because screen savers do not allow LCD monitors to enter energy saving sleep mode.

In the main entrance of the suites there are two computers that are available to guests and are not shut down daily. However, the monitors of these computers are. The



two large advertising monitors in the front entry way are turned off daily at 8pm.

Many shared or networked printers were observed. All personal printers were Energy Star models.

### Recommendations

Avoid using screensavers as they don't allow monitors to
enter sleep mode.
Clean vents & fans regularly.
Keep vents and fans on computers clean and unblocked.
Turn off monitors when not in use.
Continue purchasing Energy Star Equipment.
Unplug chargers when not in use.
Reduce brightness and increase contrast of computer
screen.

### **Kitchenette**

The kitchenette in Suite 130 has a microwave, coffee maker, Saeco tea kettle water boiler, Panasonic NC-EH22PC electric

kettle, dishwasher, warming ovens, and Energy Star

refrigerator. After using a Kilowatt Hour Meter, myPower Energy Associates discovered that the Panasonic electric kettle costs about \$46 a month if it is constantly boiling and \$26 a month when keeping water warm.

Appliances are not manually unplugged after use, except for the toaster. Power strips are not used on appliances with phantom loads, such as the microwave. The



refrigerator was clean of excess food and frost, had no unneccessary items on top of it, and is very energy efficient. It is not unplugged for long holiday vacations and the coils and fans are not cleaned regularly.



Overall, there were many Energy Star apliances in the suites and kitchenette of this building and occupants are making a strong effort to reduce energy consumption.

### Recommendations

	Clean coils & fans regularly
ш	Unplug appliances (especially the electric kettle) after use, or put them on a power strip and turn off the entire
_	strip when done. Save money for your department!
	Place reminder stickers conspicuously to remind occupants to unplug appliances when not in use.

#### **Further Resources**

Keep stocked with stickers to prompt energy conservation. Visit the myPower Resource Center
in 192 Barrows.
Become a Power Agent: bit.ly/PowerAgents
myPower office tips available at:
mypower.berkeley.edu/takeaction/office.html
Get rid of old or underutilized electronics at Berkeley
Overstock and Surplus:
businessservices.berkeley.edu/overstock

