



**Green Workplace Assessment & Certification
Program with Green Campus
Humboldt State University
Spring 2018**



Department: Mathematics and Computer Science

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Location: BSS 320

Date: 10/21/18

Baseline Certification:
Green

INTRODUCTION

What is Green Workplace Assessment & Certification Program?

GWACP is designed to increase HSU faculty and staff awareness regarding energy efficiency and sustainable practices that can be implemented in offices throughout the campus. This program aims to create a balance between workplace operations and resource use. GWACP focuses on energy improvements and behavior modification, as well as recognizing innovative ways the department reduces its carbon footprint.

Objectives

1. Assess current levels of office-wide use and impact of energy, water, associated cost, and pounds of CO₂
2. Implement educational tools to increase behavior change in the office
3. Conduct post-consultation
4. Improve office-wide savings

Role of Office Sustainability Champion

A Sustainability Champion (SC) is a volunteer from the office that Green Campus is consulting with who helps assess office spaces and identifies opportunities for improvement. They are required to be available for an initial meeting to discuss the GWA program, complete the GWA checklist on behalf of their department, and later, accompany Green Campus on a walk-through of their department to verify results and identify any additional opportunities for improvement not initially recorded.

The SC plays a vital role in the workplace for several reasons. After the GWACP process is completed, Green Campus leaves the office, whereas the SC has a permanent role in the workplace. SCs can help identify behaviors that can be changed and support workplace members in achieving them. Additionally, the SC becomes a resource of information for the workplace and develops a connection with Green Campus for future collaboration.

GWA is a great way to build student relationships with staff and faculty members at HSU!

Role of Green Campus Students

Green Campus had a team of three students that consulted with the Math and Computer Science Department. Jennifer Turk coordinated the initial walk-through consultation with the department, developed recommendations for the office regarding energy usage, water conservation, recycling and waste management, and community involvement, as well as delivered educational tools to the SC. Megan Moore helped assess office spaces during the site consultation and focused on developing energy, purchasing, and transportation recommendations to reduce the office's carbon footprint. Matthew Hill talked with the department's SC and observed characteristics of the office during the site visit to get a better understanding of how the department functions and where behavior modifications can be made. The student team was happy to interface and provide the department with feedback during the process of deploying this Green Workplace Assessment.

Site Visit

The Math and Computer Science Department is located on the third floor in the Behavioral and Social Sciences building (BSS). The main department office contains a general office, copy room and the department chairs office within room 320. They also have 25 additional personal offices and shared spaces scattered throughout the second, third and fourth floor of BSS. The department is usually open from 8am to 5pm Monday through Friday but close for lunch from 12pm - 1pm. The Math and Computer Science Department consists of 27 faculty and staff members and shares 24 toilets in BSS that are shared with other building users. The office has a small kitchen area in the main office and a shared microwave and refrigerator.

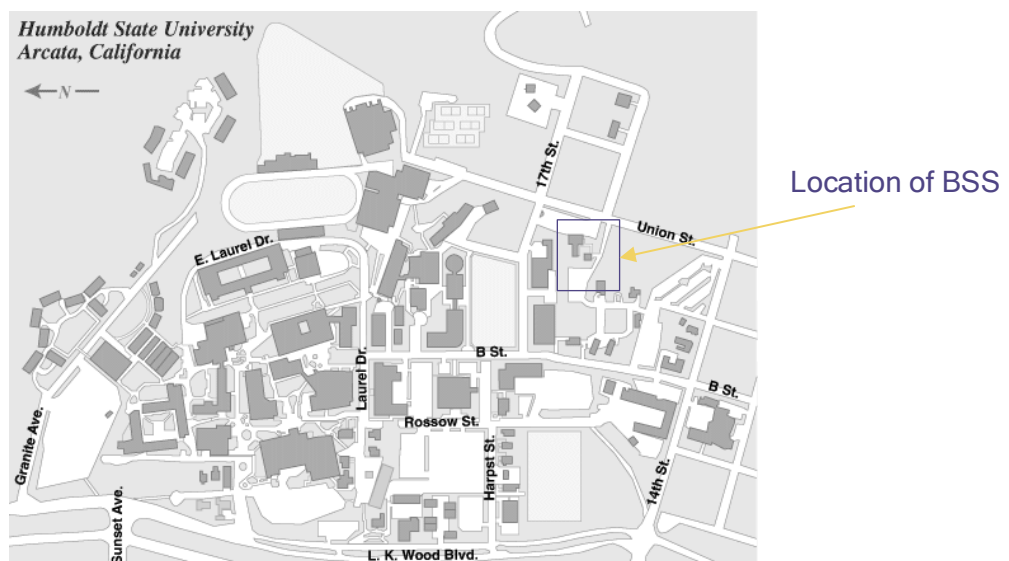


Figure 1: Campus Map.

Math and Computer
Science Department
Office



Figure 2: Floor plan for the third floor of the BSS building.

RESULTS & RECOMMENDATIONS

Green Campus was able to gather results from the following categories with help from the SC filling out a checklist of questions. Green Campus was then able to conduct a site visit to confirm or change answers from the checklist based on observed conditions. The results listed below describes what the office is doing well at and can improve on, along with recommendations and educational tool options to help the department become more sustainable.

Energy

During the site visit the GWA team observed everyday behaviors and appliance usage utilized by office members that impact the office energy use. Your department did the following things well:

- Utilizing a shared printer.
- Not using personal desk lamps.
- Not having a water cooler in the office.

There is always room for improvement. Your department can further reduce its energy consumption by doing the following:

- Removing all personal refrigerators, heaters and microwaves.
- Put up signage around the general office and in personal offices reminding faculty and staff to be energy conscious throughout the day.
- Turning off power strips at the end of the workday.
- Set the office printers, copiers and fax machines to sleep after 20 minutes of idle activity.

The GWA team can offer the following educational support for staff and faculty in your area to help reduce the office's energy consumption:

- Smart power strips that use a controlling device to automatically turn off at the end of the day.
- Timed outlets that shut off after a 0.5, 3 or 6 hours.
- Signage to remind you to turn off lights and power strips at the end of the day.
- LED Lightbulbs

Water Conservation

California's changing climate has made it ever more crucial to protect and conserve our limited water resources. Your department is actively pushing to minimize wasteful water use by:

- Not using single use water bottles.
- Facilities management is notified right away when there are leaks.
- There is signage in the bathroom reminding users to turn off the water while washing their hands.

Your department can further enhance its water conservation by:

- Having everyone in the office pledge to "Take Back the Tap".
- Putting signage in the kitchen area reminding users to turn off the water while washing their hands or doing dishes.

The GWA team can offer the following educational support for staff and faculty in your area to help reduce the office's water consumption:

- Signage to remind users to turn off the water while washing hands or doing the dishes.
- Informative sign detailing where water refill stations can be found around campus.
- Green Campus can right idea papers to the Humboldt Energy Independence Fund asking for more low flow decodes and toilet tank water displacement devices installed

Recycling & Waste Management

Recycling and waste management is essential for securing a sustainable future. These practices help conserve raw materials, reduce the need to consume precious resources as well as decrease pollution, enhance public health, and protect the environment. Your department is currently doing well at:

- Office members dispose of electronic waste at appropriate disposal sites on campus.
- There is a labeled compost bin in the office.
- Printers and copiers have single-sided paper collection trays next to them.
- Everyone in the office is using electronic communication to minimize hard-copy paper waste.
- The office offers reusable dishware in the kitchen and common areas.

There is always room for improvement. Your department can improve in waste management by:

- Having a recycling bin next to every garbage can.
- Set printer defaults to print two-sided.

The GWA team can offer the following educational support for staff and faculty in your area to help reduce the office's waste disposal:

- Providing recycling bins.
- Informative signs about what can go in recycling bins.
- Posting signage about what it means to be zero waste and how to become a zero-waste office
- Posting signage about the 5 'R's in zero waste

Purchasing

Buying office equipment is essential for efficient and effective day-to-day operation. The type of product and location of purchase can significantly influence the footprint of your office. Your department did the following things well:

- New purchases of workplace equipment are Energy Star Certified.
- Purchase office supplies like pens and staples in bulk.

This department can do the following to reduce its carbon footprint from purchasing:

- Encourage the office to purchase 100% recycled paper which is required by HSU.
- Encourage the office to make purchases from local businesses whenever possible.
- Use rechargeable batteries instead of disposable ones.

- Encourage the office to purchase food that is local, organic and fair trade.

The GWA team can offer the following educational support for staff and faculty in your area to help reduce the office's carbon footprint through purchasing:

- Providing signage about waste and recycling
- Providing a sustainability fun facts sheet

Transportation

Even though our current transportation infrastructure improves public accessibility, the dominant mode of transportation (single occupant vehicle travel) has irrefutably contributed to climate change. Reducing our carbon footprint via alternative transportation is critical to maintaining a livable climate. Your department did the following things well:

- The office offers video and teleconferencing as a preference for off campus meetings.

There is still room for improvement. This department can do the following to reduce its carbon footprint from transportation:

- Walk, bike or take alternative transportation to work if possible.
- Put signage up in the office about alternative transportation options.

The GWA team can offer the following educational support for staff and faculty in your area to help reduce the office's carbon footprint through transportation:

- Providing a 'Bus Ride Guide'
- Provide signage about alternative transportation options

How to Ride Guide - Humboldt Transit Authority

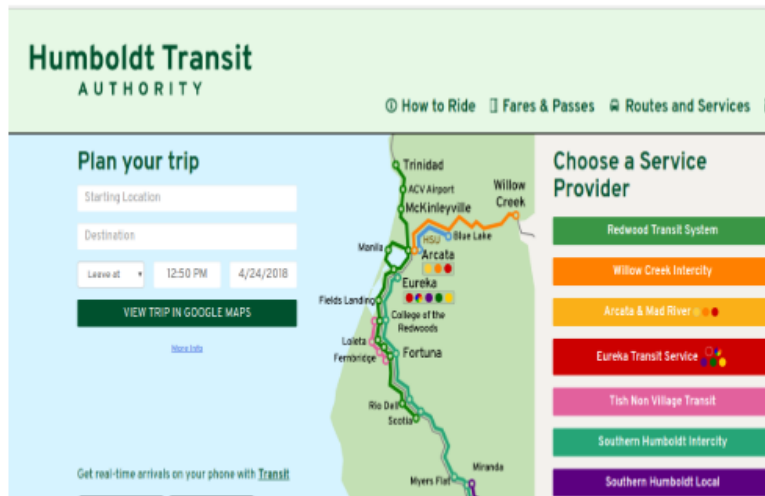


Step #1



Plan your trip!

- Visit <http://hta.org/> and place in your **Starting Location** and **Destination**



-Or! Download the free [Transit App](#) for real time arrivals and help you navigate you from point A to point B



Figure 3:A screenshot of Green Campus' bus ride guide that is essential for people new to the area.

Community Involvement

Involvement in the campus community fosters partnerships, opens doors to new resources, and improves leadership skills. Your department is currently:

- Your department did not receive 100% on any questions within this section.

Your department can become more involved in the community by:

- Signing up to receive the Green Campus monthly newsletter.
- Encouraging the department to ensure that newly hired team members receive and review HSU's Virtual Green Office program.

The GWA team can offer the following resources for staff and faculty in your area to help the department become more involved with the community and learn sustainability tips:

- This link is to HSU's Virtual Green Office program;
<http://www2.humboldt.edu/greenroom/office/>
- GWA offers a bimonthly newsletter specifically for departments at HSU that will provide tips about ways to make your department more sustainable.



Figure 4: This is a screenshot of Green Campus' newsletter from one of the pages

PLANNED NEXT STEPS

Interim Education & Engagement

As the sustainability champion it is your responsibility to encourage and support the faculty and staff in your office in becoming more sustainable. The Green Workplace Assessment Team will provide you with the necessary educational tools and signage that you can post around your office and offer to faculty for their personal offices. If you would like, the Green Workplace Assessment Team can host an educational presentation to your faculty and staff.

Return Visit

Green Campus would like to do a follow up site visit and assessment within 3-4 months in order to see if anything has changed since the first consultation. Green Campus hopes to see the office has increased its behavior change over the past 3-4 months. A return visit would be best to do in March 2019. The best time to do the return visit would be when Ryan Rasmussen, the department's SC, most of the office members, and some of the original GWA team members can be present.

CONCLUSION

To conclude, Green Campus certified the Mathematics and Computer Science Department with a Green rating for the Green Workplace Assessment. The Green rating means your department has lots of room for improvement. We hope for the department to consider our recommendations because we would love to see this department contribute to climate action goals.

Table 1 shows the office-wide usage and impact results over a one-year period. This data will be used after the post-consultation to determine if your office has increased its sustainability given the Green Workplace Assessments Team's support and educational tools.

The GWA team would like to thank the Sustainability Champion for your department, Ryan Rasmussen. He has been very helpful and we are glad to have him as the champion in the Math and Computer Science Department to help make HSU more sustainable. Next, we hope to continue working with the Math and Computer Science Department and Ryan next semester to conduct a post-consultation.

Table 1: Displays how the Math and Computer Science Department scored in each category in terms of dollars.

Total Office-Wide Use and Impact				
	Total kWh/yr	Total H2O gals/yr	Total CO ₂ /yr (lbs.)	Total \$/yr
Baseline Results	4,292,709.33	678,912.00	6,387,551.49	\$666,851.02

Table 2: Displays how the Math and Computer Science department scored in each section of the questionnaire.

Green Office Practices	Points Earned	Potential Points	Percentage earned	Weighted Points	
Energy	11.5	25	46%	3.45	
Water Conservation	9	14	64%	1.35	
Recycling & Waste Management	12.5	18	69%	1.875	
Purchasing	6	15	40%	0.6	
Transportation	3	8	38%	0.3	
Community Involvement	0.5	10	5%	0.1	
Creative & Innovation Options	0	0		0	Level of Certification
Total Points	<small>(extra innovation points not included in potential)</small> 42.5	90		7.675	GREEN