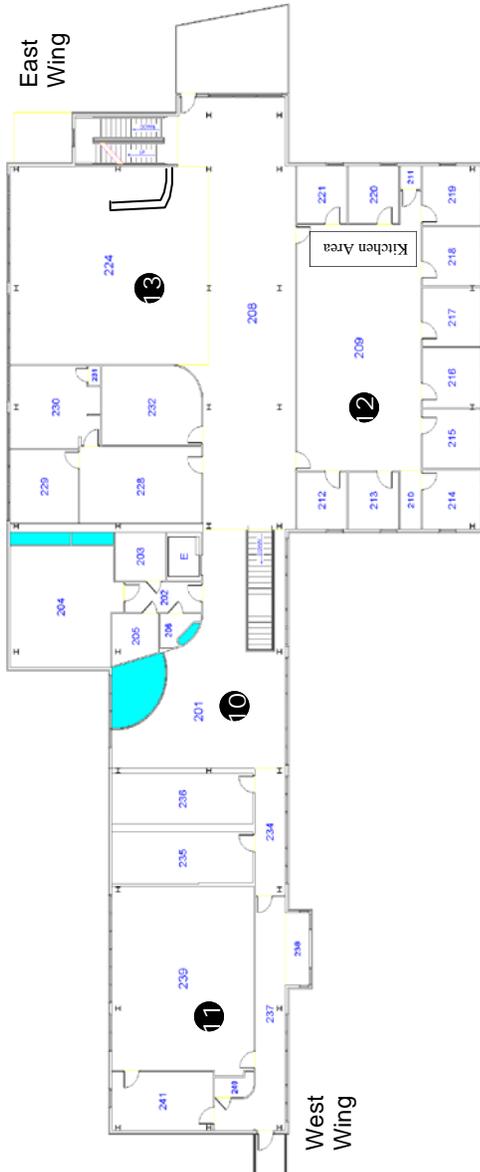


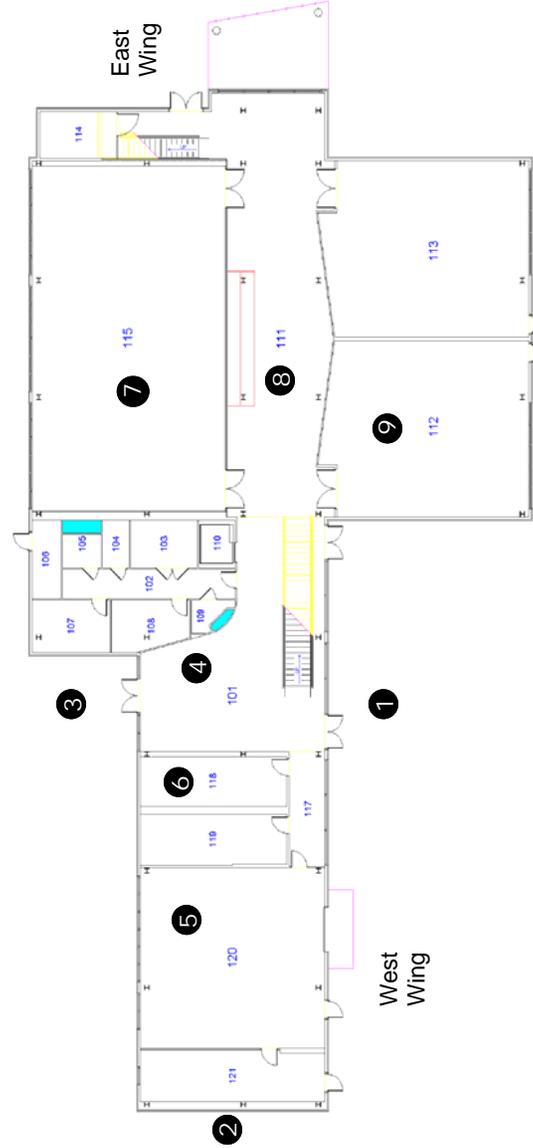
A Beacon of Hope



*Kirsch Center for
Environmental Studies*



Second Floor



First Floor

DeAnza  College

Welcome to the Kirsch Center for Environmental Studies!

- The Kirsch Center - A Beacon of Hope
- A Climate Responsive, Energy Efficient Building
- Designed to use the sun and seasons

The Kirsch Center uses less energy than a conventional building. The building itself is a teaching tool; the interior structure and utility systems are exposed as much as possible. The interior atmosphere is a clean, high-tech look similar to many of the most innovative Silicon Valley companies.

The primary energy design goals were to: maximize use of on-site renewable energy; minimize energy demand from the utility grid; assure thermal and visual comfort; maximize flexibility of use of building spaces; and minimize emissions from construction materials, building construction and lifetime use of the building. You will notice the natural light reflecting off the white walls and ceilings, creating an atmosphere that is healthy, bright and comfortable.

1) Solar Plaza

The Solar Plaza showcases important features of a green building. Windows and sun shades on the south side maximize heat and light from the sun in the winter and block the sunlight in the summer. The Sycamore trees are deciduous. In the summer, the trees block the sun while in winter, the leafless branches allow the sunlight into the building. The bioswale, a type of biofilter, to the south of the walkway, captures rainwater from the slanted roof. This system stores the stormwater runoff rather than sending it into the storm drain.

2) West Wing

Notice the narrow design of this space and that there are no windows. Afternoon summer sun is very harsh and heat a building very quickly. Not having windows reduces heat transfer from the outside to the inside of the building. The west outdoor space will soon house the Stewardship Amphitheater for outdoor student and public events.

3) North Entrance

Like the south side, the north has many windows. These windows flood the classrooms with natural daylighting, providing a bright and comfortable environment for students. Students learn better in naturally daylighted classrooms. Daylighting reduces the amount of electricity needed for lighting these rooms.

4) Energy Exhibit Hall

This transitional area connects the “passive” narrow west wing and the “active” expansive east wing. The plasma screens are part of the Environmental Studies Depart-

ment’s instructional program and includes nature-based films in a video-on-demand exhibit. An Energy Monitoring Display can be switched to view a graphic on the energy generated by roof-top photovoltaics (36.5 kW PV system) or the Building Monitoring System (BMS) for real-time temperature readings to allow students in the energy management program to monitor the building’s heating and cooling systems.

5) Biodiversity Lab (John Muir Institute of Natural Sciences)

This hands-on learning lab teaches students about California’s incredible diversity of plants, animals and ecosystems. The natural daylighting is more pleasant than fluorescent lights, and studies show that students perform better in natural daylight classrooms. The floor contains fly-ash in the concrete. Fly ash, a by-product of coal fired power plants, replaces cement in the concrete. We get a high-quality concrete and reduce the amount of waste to landfills. The radiant floor system in this room includes plastic tubes which heat or cool the concrete. The windows and fans provide additional natural ventilation. The red light/green light system tells the user to open or close the windows. This room also has a biodiversity “garage door,” which opens to our outdoor learning areas.

6) Restrooms

Waterless urinals in the men’s room save 45,000 gallons (170,000 liters) of potable water each year; floor tiles are made of old car windshields; and the toilet seat lids are made from recycled water bottles. The countertops are made from granite, which is a highly durable material and connects the building to the California landscape.

7) KC 115

This room encourages students to work in teams. Students enjoy working together on community-based projects. In this environment, teachers and student mentors are facilitators, not lecturers. *How do you like to learn?* This room demonstrates an efficient raised floor heating and cooling system. Air flows beneath the floor and rises through circular vents, not blown out ceiling vents. Rising air exhausts out the return ducts in the ceiling and takes dust and other contaminants with it, improving air quality. Look at the carpeting; it’s modular, made from recycled materials, the backing contains no vinyl or PVCs, and uses non-toxic adhesives. The furniture found in this building is durable, cost effective and minimizes environmental impact. For example, the tables have 80% wheat stalk as their core and the chairs are made from recycled materials and are recyclable.

Kirsch Center for Environmental Studies

“a building that teaches about energy, resources and stewardship”

8) MAX 1 (Student Learning Spaces)

Students can use the raised seating in these area throughout the building to study, debate environmental topics, meet with others and view videos. The Monterey Bay Aquarium was an inspiration for us. Our Kirsch Center design team, including students, faculty, staff, leadership and consultants wanted to create special learning spaces.

9) KC 113

This classroom is on the south side of the building. The light shelf just under the windows bounces light into the room to maximize daylighting. *See our Mecho shades?*

10) Biodiversity Exhibit Hall (Upstairs)

This area encourages community learning with our “diner booth” and the breakout areas for study groups. One of the design criteria for the Kirsch Center was to be able to bird watch out of every window. *How many birds can you count outside? Are you keeping a bird life list?*

The large windows to the south provide a spectacular view of the surrounding coastal ranges and connect us to the local environment. Students enjoy the comfortable and welcoming atmosphere. *What do you think?*

11) Statewide Energy Management Program Lab

This classroom is the headquarters for SEMP classes. Students learn about energy management systems and controls, lighting, green building design and energy policy. Look to the west to observe the “truth wall” that showcases the radiant floor system for the west wing.

12) Stewardship Circle, the Jim Anderson Memorial Library and the Student Mentor Wall of Fame

The pop-up clerestory above you floods this special gathering area with natural daylight. This notable place welcomes students, faculty and our partners to collaborate on stewardship projects along the 37th parallel.

13) Stewardship Resource Center (SRC) and MAX 2

To the east is the Cheeseman Environmental Study Area (ESA) which showcases the California Floristic Province, with over 400 native species and 12 plant communities of California. To the north is the SRC, where students can study, check out class materials, work on puzzles, or bird watch. The SRC countertop is made of pressed sunflower seed hulls; the cabinets are constructed from FSC certified lumber. The red steel beams around you are made from recycled steel. On the south wall are the 37th parallel wildlife corridors student projects.

To join us or to learn more, contact: Pat Cornely, Executive Director, Kirsch Center for Environmental Studies at cornelypat@fhda.edu or (408) 864-8628