

# California State University, Chico Campus As a Living Lab (CALL) Project: *Sense of Place*



## Connecting Courses Across the Sustainability Pathway with Campus Utility Data



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### 1. CALL Objectives

- Establish a public point of access to campus building energy consumption data and foster an expanded dialogue between students, faculty, administration and facilities management regarding campus energy consumption and opportunities for conservation.
- Integrate real campus utility data into the sustainability pathway course curriculum with a focus on utilizing cutting-edge utility management software programs and analytics in new and innovative ways.
- Explore a range of strategies for engaging building occupants and residents in better understanding their buildings and the impacts of their interactions with them on campus energy consumption and compel them to act for conservation.

### 2. Program Partnerships



- Chico State Facilities Management & Services
- University Housing & Food Services
- Associated Students – Wildcat Rec Center

*Facilities*



*Academics*

#### College of Natural Sciences

- Department of Environmental Literacy
- Department of Geological & Environmental Sciences

#### College of Behavioral Sciences

- Department of Economics Undergraduate Education
- First Year Experience Program



### 3. Campus Building Integration & Academic Course Outcomes

#### CALL I AY '14/'15



**O'Connell Academic 1990's**



**Tehema Academic 1990's**



**Holt Academic 1970's**



**Phys Science Academic 1970's**

#### CALL II AY '15/'16



**Sutter Residential 2010's**



**Shasta Residential 1950's**



**Lassen Residential 1950's**



**Whitney Residential 1950's**

#### CALL III AY '16/'17



**SSC Administrative 2010's**



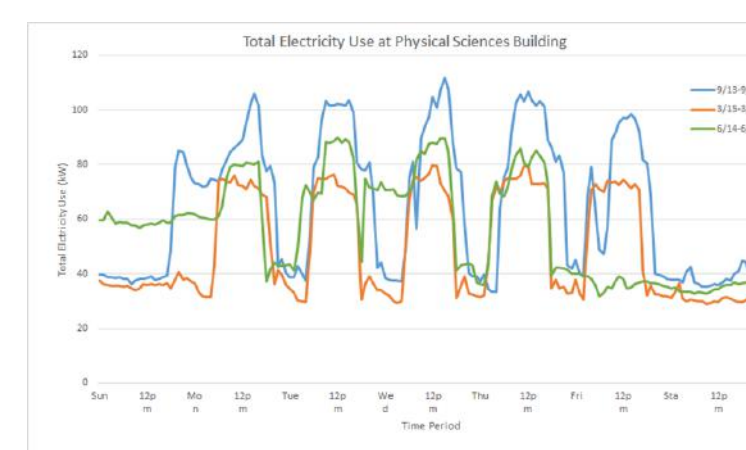
**WREC Rec Facility 2010's**



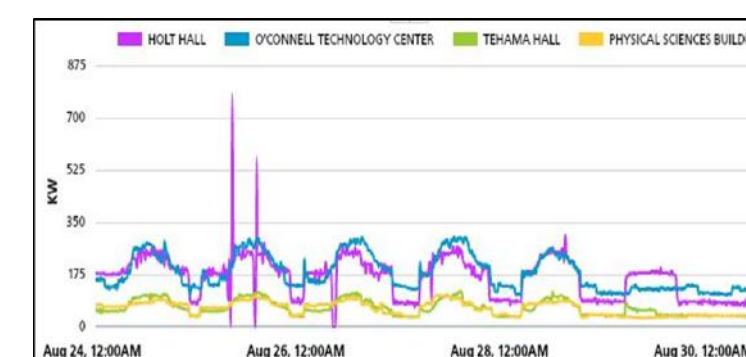
**Taylor II Academic 2010's**



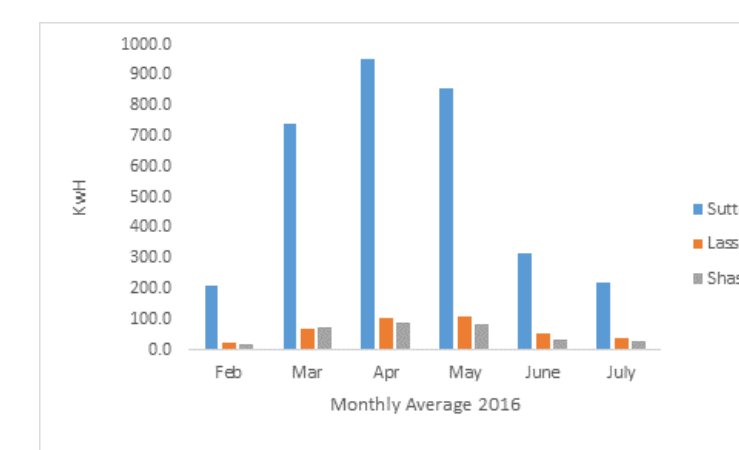
**Butte Academic 1950's**



Students in GEOS 330 have studied energy trends in the Physical Science building their classes are taught in.



GEOS 330 students have also compared consumption patterns across campus academic buildings.



Students in ENVL 105 have analyzed energy trends in three campus residence halls and the dining center.



Students in UNIV 105 have developed peer-to-peer outreach videos encouraging residents to act for conservation.

Students in ECON 365 are exploring different ways to incentivize efficiency and surveying other students' valuation of these efforts.

Students in GEOS 130 are estimating the carbon footprint of various campus buildings and proposing different types of local offsets.

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### 4. GE Pathway in Sustainability

*General Education Pathway courses participating in CSU, Chico's CALL Project*

#### Lower Division (9 units required)

##### Foundation

CHEM 100: Chemistry & Current Issues  
CIVL 175: Biological Processes in Envl Engineering  
GEOG 101 (I): Physical Geography  
**GEOS 130: Intro to Environmental Science**  
NSCI 101: Intro to Earth's Environment  
BIOL 102: Intro to Living Systems

##### Area C1: Arts

CMGT 275: Architectural History  
THEA 252: Politics, Performance & Power

##### Area C2: Humanities

ENGL 252 USD: American Indian Literature  
PHIL 129: Environmental Ethics  
RELS 247: Religion, Ethics & Ecology

##### Area D1: Individual & Society

GEOG 102 GC: Human Geography  
HIST 105 GC: Global Environmental History  
RECR 210: Natural Resources & the Informed Citizen

##### Area D2: Societal Institutions

ANTH 112 GC: Society, Time & Archaeology  
ANTH 116 GC: Power & Scarcity: Anthro of Change  
GEOG 106 USD: The American West

##### Area E: Learning for Life

**ENVL 105 (I): Environmental Literacy**  
NFSC 100: Basic Nutrition  
**UNIV 105 (I): Self, Identity & Sustainability**

#### Upper Division (9 units required)

##### Natural Sciences

BIOL 334: Conservation Ecology  
**GEOS 330 (Z)/(I): Environmental Science - CAPSTONE**  
PSSC 390 GC (F): Food Forever: Sust Food Production  
PSSC 392 GC (S): World Food & Fiber Systems

##### Humanities

ENGL 338 (Z)/(I): Environmental Rhetoric  
HIST 341 USD: American Environment  
PHIL 336 USD: American Indian Envl Philosophies

##### Behavioral & Social Sciences

**ECON 365: Environmental Economics**  
GEOG 304: Environmental Issues  
SOCI 420 USD: Environmental Sociology