

Abstract: California Higher Education Sustainability Conference 2013

Sustainable Campus Initiatives as a Product of Interdisciplinary Teaching

Cal Poly, San Luis Obispo:
Sustainable Campus Initiatives as a Product of Interdisciplinary Teaching



Description

Housed within the College of Architecture and Environmental Design, the Sustainable Environments Minor inspires and encourages students to understand, conceive and implement sustainable projects, both on the Cal Poly campus and in the San Luis Obispo region. The minor is structured around two core classes, EDES 408 - Sustainable Environments and EDES 408 - Implementing Sustainable Principles, which is taught by an interdisciplinary team of faculty from the College of Architecture and Environmental Design (CAED). While most students who enroll in the minor come from one of the 5 departments within the CAED, Architecture, Landscape Architecture, City and Regional Planning, Architectural Engineering and Construction Management, student participation is campus-wide. Numerous sustainable initiatives and projects have been implemented on the Cal Poly Campus and the surrounding communities as a result of this minor.



CAL POLY
SAN LUIS OBISPO

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College of Architecture & Environmental Design

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Sustainable Environments Minor

CORE CLASSES (8 UNITS)

EDES 408 Sustainable Environments

EDES 408 Implementing Sustainable Principles

plus approved electives (16 units) = 24 total units required

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EDES 408 - IMPLEMENTING SUSTAINABLE PRINCIPLES

- Interdisciplinary faculty (Architecture, Landscape Architecture and City and Regional Planning)
- Project-based class, 80-90 students
- Interdisciplinary teams to develop concrete proposals for implementing sustainable practices or products at various scales
- Project must be implementable

Examples of Implemented Initiatives

Kidical Mass

- Organized, family friendly bike rides
- Dedicated meeting place - first Thursday of each month
- Goal to get kids on bikes, teach them bike safety and skills and to engender a love of biking

SJD County Plastic Bag Ban

- Group project for bag ban was presented to SJD city council, received overwhelming support
- County Integrated Waste Management Authority drafted ordinance to ban bags at large stores throughout SJD in 2012
- Ordinance went into effect Oct. 2012

Felicit Farms

- Felicit Farms - Nipomo, CA - Facility for foster kids to learn about growing food and cooking
- Project to design a greenhouse, outdoor kitchen and herb garden
- Herb garden was built through student labor and donated materials

Cal Poly Bio-diesel Club

- Initiated program to convert diesel powered fleet of delivery trucks to run on biodiesel fuel
- Waste cooking is converted to B20 fuel, currently through a 3rd party
- Students - designed and constructed a biodiesel reactor. Ultimate goal to put into production for a closed loop system on campus

Cal Poly Bicycle Coalition

- Provides programs and advocates for more cycling on campus, cycling safety, etc.
- Advocates for better cycling facilities, infrastructure, and connections to the community of San Luis Obispo
- Seeking recognition as a Bicycle Friendly University by the League of American Bicyclists

Empower Poly Coalition

- Coalition of Cal Poly sustainability related organizations and student run clubs with interests in environmental justice, human rights and healthy lifestyles
- Sponsor events, nationally known guest speakers, classes, conferences, etc.

Housed within the College of Architecture and Environmental Design (CAED), the Sustainable Environments Minor inspires and encourages students to understand, conceive and implement sustainable projects, both on the Cal Poly campus and in San Luis Obispo. This paper will focus on one class, EDES 408, Implementing Sustainable Principles, which is taught by an interdisciplinary team of faculty from the CAED. While most students in the minor come from one of the five departments within the CAED (Architecture, Landscape Architecture, City and Regional Planning, Architectural Engineering and Construction Management), students from other colleges have participated, including engineering, business and environmental management. This paper will focus on actual implemented sustainability outcomes that have occurred on the Cal Poly campus and in the local community as a result of this class. Examples of implemented projects include a plastic bag ban, a bio-diesel program and the formation of a campus bicycling coalition.

--Associate Professor Beverly Bass