Submission Deadline: March 20, 2015, 6:00 p.m., no exceptions

2015 CA Higher Education Sustainability Conference - hosted by San Francisco State University

This form is only for nominations in the **Sustainability in Academics** category

This award is meant to highlight the unique role that college campuses play in advancing sustainability—educating students. The award is also meant to recognize programs that are contributing to the educational component of the American College and University President's Climate Commitment (ACUPCC), to which all UC campuses and several CSU campuses are signatories, which states that signatories need to develop "actions to make climate neutrality and sustainability a part of the curriculum and other educational experiences for all students". Academic programs and projects that are eligible to apply for the award include (but are not limited to) classes focused on sustainability, sustainability majors and minors, general education sustainability requirements, and interdisciplinary learning communities. The award application must be submitted by a faculty member.

I. Contact Information

1. Campus California Polytechnic State University, San Luis Obispo

3. Telephone (805) 235-1409 cell / (805) 756-2040 office

4. Email jragsdal@calpoly.edu

II. Project Information (a student group may submit a single nomination for up to three discrete projects)

1. Project name Cal Poly's Sustainable Environments Minor: A Model for Interdisciplinary

Education in Sustainability.

2. Project location California Polytechnic State University, San Luis Obispo

Open to All Cal Poly students

3. Implementation period 1993 – present, current instructors 2002 – present.

4. Brief narrative description of project goals and strategies (200-300 words)

For 22 years the Sustainable Environments minor has offered Cal Poly students an opportunity to shape their own education informed about principles and problems of sustainable environmental design with global, regional and local perspectives and concepts – and then to attempt to implement sustainable practices locally. The program provides students from across all majors at the university with knowledge and abilities needed to integrate concerns for ecology, social equity and economics within the context of human and natural resource systems and the built environment. The required backbone of the Sustainable Environments minor is a two-quarter, two course, team-taught interdisciplinary sequence that has served as a model nationally and internationally for inter-disciplinary undergraduate core education in sustainability. In addition to the two, required courses, the minor requires completing courses selected from a variety of departments in almost every college including Agriculture,

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Anthropology, Architecture, Biology, Botany, City & Regional Planning, Economics, English, Forestry, Natural Resources, Geography, Humanities, Landscape Architecture, Philosophy, Political Science, Psychology, Physics, Sociology, and UNIV.

Students in the SE program come from every college at Cal Poly. Over 1400 students have graduated with the Sustainable Environments minor and many of them have become influential and leaders in implementing sustainability into their fields.

5. Project budget and/or funding model (include any special/grant funding sources that were obtained for the project, if applicable)

The Sustainable Environments Minor program has one faculty advisor to manage applications, progress toward completion and advising. The required, two-course, sequences of courses are team taught from three departments in the College of Architecture and Environmental Design – Architecture, City & Regional Planning and Landscape Architecture. For each course, faculty divide WTUs (Weighted Teaching Units) each quarter yet participate fully in the course. No additional time or resources are assigned to faculty in order to be involved in the program. A small budget is requested annually from the CAED Dean's office and sometimes the faculty home departments (+/- \$750) in order to support guest speakers and a required field trip in the fall quarter.

6. How was the sustainability and educational impact of this project assessed (200 word limit)?

Several assessment methodologies are used throughout the two-course sequence to gauge student learning, comprehension of key principles and educational impact. These methods include pre-course surveys, 'thinking papers' or reflection essays on key principles, public presentations of student proposals and post course assessments. End of course assessments by students consistently evaluate these courses very highly and there remains a strong interdisciplinary demand for these courses during enrollment periods.

Faculty meet regularly to assess course goals, establish annual themes and plan curriculum. In addition, the program has received regional (USGBC Central Coast Chapter 2013) and national (AIA Tides Foundation Ecological Literacy Program 2005). The best methods of gauging impact come from the responses from alumni post graduation and in seeing projects proposed and implemented as part of the program structure. Through these informal assessments, former students note the importance of understanding the broad economic, environmental and equity concerns with sustainability, the notions of understanding everything is connected and impacting change is complex, and the importance of seeing and working in interdisciplinary settings.

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7. Relevancy to the Best Practice Program – Please provide a detailed narrative of the project, highlighting those project features that qualify it as a best practice readily replicable on other campuses (500 word limit).

Following the principle of ecology that everything is connected, the Sustainable Environments minor is both interdisciplinary and comprehensive. Our method accomplishes both a general presentation of sustainability and a selection of ways sustainable design can be implemented locally. The backbone of the "Sustainable Environments" minor is a two-quarter, two course, team-taught interdisciplinary course sequence that has served as a model nationally and internationally for inter-disciplinary undergraduate core education in sustainability. In addition to this core sequence, students must fill the remainder of units for the minor from a long list of courses from across the university. These courses must have a strong component or link to sustainability.

The two-course sequence consists of:

- Edes. 406: "Sustainable Environments: An Interdisciplinary Overview" is a fall quarter course that introduces, illustrates and analyzes concepts and principles for sustainability. The fall quarter course usually fills to capacity (100 students/year) with students from almost every college at Cal Poly. The course is multi-modal combining lectures, films, writing, group activities, both on-campus and off-campus field trips, community events, and on-line content. This course sets the table with common awareness of key ideas for the next course.
- EDES. 408: "Implementing Sustainable Principles: Global concepts to Local Actions" follows in the winter and spring quarter. Students in the program take this second course in which they are formed into interdisciplinary teams to devise projects that plan real local implementation of sustainable principles and environmental design. 40 to 80 students take this "learn-by-doing" course each year. The interdisciplinary student teams to work with campus or community individuals and organizations to develop tools, processes or designs, for community-based projects and proposals at various scales to address the social, environmental and economic issues of sustainability. Projects range from policy and planning recommendations to design proposals, technical fixes, informational projects, organization forming, and built projects.

If the student teams do not complete their projects in one quarter and desire to keep working, they are offered EDES.410:"Advanced Implementation of Sustainable Principles" as a directed study course in which to complete their projects.

During the course sequence, the students do much of the creative visioning that institutional and professional and business entities don't have enough time for. The projects are exhibited to the public,

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have been presented to local governing bodies, and have received wide media coverage extending our ideas into the public realm. Many of the projects have been implemented in the campus and local communities, including:

- Creation of "Empower Poly" (a coalition of student-led campus clubs that share goals relating to sustainability),
- Creation of the "Cal Poly Bicycle Coalition"
- Creation of the "Cal Poly Bio-diesel Club"
- Successful Advocacy for green certifications of campus projects
- Development of methods for increasing student awareness of sustainability, consumer sovereignty,
- Advocacy for greener "WOW Week" practices at Cal Poly
- · Increased demand for on-campus mixed-use housing
- · Changes to university food service practices
- Better practices in measuring campus water consumption
- Proposed policies to improve waste management including post-consumer food recycling
- Completing analyses and actions with local school districts for "greening" local schools and helping them procure grants
- Working with educators to develop university and primary school curriculum on sustainability
- Design and construction of community gardens
- Design and construction of physical improvement projects for the SLO women's shelter and foster homes
- Consultation to improve transit ridership considering routes, buses, stops, and schedule graphics
- Creation of certification program for "dry" (non-irrigated) viticulture
- Collecting and disseminating data on local farms and food sources
- Working with local businesses, including food service and rental housing, to assess and improve sustainable practices
- -Draft policy incentives for infill housing
- --Consulting with San Luis Obispo Planning Department on proposal for capping a portion of 101 through the city
- -Sustained and effective advocacy for reducing the use of plastic bags

The SE Program is an effective, interdisciplinary and collaborative approach to integrating sustainability into Cal Poly's curriculum in order to better serve our students and meet a mandate to help create a thriving, ethical and civil society as noted in the text of the ACUP's Climate Commitment.

8. Collaborative design and implementation – Describe the way in which this project incorporated stakeholders from multiple disciplines across campus and/or the local and regional off-campus community. Describe how collaboration produced sustainable solutions and improved the project's performance (300 word limit).

Initial stakeholders in Cal Poly's Interdisciplinary "Sustainable Environments" program were faculty and students aware and concerned about the threats to human survival on the planet and quality of life. As

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awareness for the need for sustainability education has become more pervasive and mandated such education has also become sometimes superficial, narrow or "green-washed". Some faculty have seen an opportunity to simply ride the wave and some students have considered "sustainability" as just another resume item to help them get a job and some administrators have seen the subject as simply a way to build programs and meet demand for growth. The principal stakeholders in our project remain those with an understanding of how education is crucial for human's sustainable future and that the truths and consequences of our actions may be disruptive of existing paradigms, difficult and uncomfortable to implement and that the options are limited the longer we take.

Participation by faculty is primarily voluntary and often in an 'overload' or extra teaching responsibility above normal teaching responsibilities. The two-course sequence is taught collaboratively and in interdisciplinary teams of faculty (to practice what we preach). Faculty from at least three departments team-teach (assigned faculty, fully participate in all aspects of the course) in this sequence. Faculty reside in the College of Architecture and Environmental Design and from the departments of Architecture, City and Regional Planning, and Landscape Architecture. We also collaborate with a rich array of people, organizations, and entities at Cal Poly and in the local region including: most of the other five colleges on campus, Cal Poly Facilities & Planning departments, San Luis Obispo city and county governments, local school districts, public agencies, non-profits, chamber of commerce, local businesses, local offices of national businesses, and others.

Faculty strive for continuous improvement in the delivery of key concepts and in improving student learning. Communication among stakeholders and students has been critical in this improvement.

9. If applicable, describe how this project has been communicated to and received by campus stakeholders. Describe what has been met with satisfaction or dissatisfaction, and why (300 word limit).

Although receiving limited support, the program has received modest support and appreciation from the administration. Students, student groups and project recipients provide the greatest feedback and levels of satisfaction with the program. For 22 years, the program has been successful in offering students the opportunity to become substantially informed about the general ideas of sustainability and then to practice what they've learned by developing and implementing sustainability project proposals. As noted earlier, over 1400 students have graduated with the Sustainable Environments minor from majors across the university and many of them have become influential and leaders in implementing sustainability into their fields.

Dissatisfaction has typically come from the number of students able to participate in the program. The number of students has been limited by a shortage of faculty with the ability and interest to teaching away from their home departments to a broad array of university students. EDES 406 is offered in a lecture-style classroom and serves up to 100 students one-time per year. EDES 408 is offered in a

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smaller lecture-activity style format and serves up to 40 students one- to two-times per year depending on student enrollment and faculty availability.

III. Additional information

Please provide any additional information necessary to assist the selection committee in understanding and evaluating the project.

Current faculty involvement represents the second and sometimes third generation of faculty participating in the 22 year history of the program. The core faculty remain a small, but dedicated group from the departments of Architecture, City & Regional Planning and Landscape Architecture. Current faculty involvement includes the following people in addition to the two speakers/submitters listed below:

Joseph Ragsdale, Associate Professor, Landscape Architecture (presenter/speaker)
Jonathan Reich, Professor, Architecture (presenter/speaker)
Paul Wack, Professor Emeritus, City & Regional Planning
Tom diSanto, Associate Professor, Architecture
Adrienne Greve, Associate Professor, City & Regional Planning
Beverly Bass, Associate Professor, Landscape Architecture
Chris Clark, Lecturer, City & Regional Planning
Margot MacDonald, Professor, Sustainable Environments Minor Advisor

IV. Speaker bio

Speakers will present at the Sustainability Conference if their project is selected for a best Practice Award. Speaker bios will appear in the conference program. Please submit the following for each speaker (limit of two speakers per project).

 Name and Title (should include name, acronyms (PhD, LEED AP, etc), job title, department, and institution)
 Joseph Ragsdale, ASLA FAAR

Associate Professor, Landscape Architecture Department

California Polytechnic State University

2. Email jragsdal@calpoly.edu

3. Phone Number (805) 235-1409 cell, (805) 756-2040 office

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Bio (100 word limit)

Joseph Ragsdale is a Professor of Landscape Architecture at California Polytechnic State University where he has taught since 2002. He has also taught at U.C. Berkeley and at the University of Virginia. As a Landscape Architect he has practiced in San Francisco and Los Angeles on such projects as the Getty Museum and Pac Bell Park (AT&T Park) and in Virginia with Julie Bargmann as D.I.R.T studio focusing on revitalization and regeneration of polluted and toxic former industrial sites. Professor Ragsdale was awarded the coveted Rome Prize from the American Academy of Rome in 2003. His research at the Academy related to historical impacts of resource extraction, material culture and landscape focusing on Roman quarries, the "negative landscapes" and the communities that surrounded them.

 Name and Title (should include name, acronyms (PhD, LEED AP, etc), job title, department, and institution)
 Jonathan Reich

Professor, Architecture Department

California Polytechnic State University

5. Email jreich@calpoly.edu6. Phone Number (805) 756-1351 office

Bio (100 word limit)

Jonathan Reich is a Professor of Architecture at California Polytechnic State University San Luis Obispo. For 14 years he has been the lead faculty member in Cal Poly's award-winning "Sustainable Environments" program. He has taught at the University of Idaho in sustainable use of wood and sustainable urban design, and at the University of California Berkeley where he was instrumental in developing the foundation courses in Environmental Design. He has taught in Italy since 2000; at Penn State's Rome program in sustainable urban systems and at Universita di Camerino in design of coastal cities for sea level rise. In 2011 he was awarded a Senior Fulbright Scholar Grant to teach sustainable design at the UniCam's Scuola di Architettura e Design in Ascoli Piceno. He is an Architect of public and private work recognized for interdisciplinary sustainable design in affordable housing, schools, bio-technical urban stream restoration, public open space design, and freeway "lid" projects.

At least one of the speakers listed here must be a student, staff, or faculty member. Co-presenters from non-campus entities (e.g. architecture firms, consultants, etc.) are permitted. Please note that if the campus speaker cancels, a co-presenter not affiliated with a campus may no longer be allowed to present.

V. Nomination submittal

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Send completed Nominations to Janika McFeely, Sustainability Specialist at the University of California Office of the President (janika.mcfeely@ucop.edu). **All submittals must be received by 6:00 p.m. on March 20th, 2015, no exceptions.**

Answers to frequently asked questions can be found at: http://chesc.org/awards/faq.php. Please direct any other questions to Janika McFeely, (510)987-9896.