University of California, Irvine

The following information was submitted through the STARS Reporting Tool.

Date Submitted: March 19, 2015

STARS Version: 2.0

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The information presented in this submission is self-reported and has not been verified by AASHE or a third party. If you believe any of this information is erroneous, please see the process for inquiring about the information reported by an institution.

Institutional Characteristics

The passthrough subcategory for the boundary

Credit
Institutional Boundary
Operational Characteristics
Academics and Demographics

Institutional Boundary

Criteria

This won't display

"---" indicates that no data was submitted for this field

Institution type:

Doctorate

Institutional control:

Public

Which campus features are present and included in the institutional boundary?:

	Present?	Included?
Agricultural school	No	No
Medical school	Yes	Yes
Pharmacy school	No	No
Public health school	No	No
Veterinary school	No	No
Satellite campus	No	No
Hospital	No	No
Farm larger than 5 acres or 2 hectares	No	No
Agricultural experiment station larger than 5 acres or 2 hectares	No	No

Reason for excluding agricultural school:

UC Irvine does not have an agricultural school.

Reason for excluding medical school:

UC Irvine's School of Medicine is included in its institutional boundary.

Reason for excluding pharmacy school:

UC Irvine does not have a pharmacy school. UCI has a Department of Pharmaceutical Sciences, a stand-alone academic unit within Academic Affairs.

Reason for excluding public health school:

UC Irvine does not have a public health school. UCI's Program in Public Health earned accreditation from the Council on Education for Public Health, an independent agency recognized by the U.S. Department of Education to accredit schools of public health and public health programs. The 2012 accreditation is valid through 2017.

Reason for excluding veterinary school:

UC Irvine does not have a veterinary school.

Reason for excluding satellite campus:

UC Irvine does not have a satellite campus.

Reason for excluding hospital:

The UC Irvine Medical Center is located 13 miles north of the main campus in Orange.

Reason for excluding farm:

UC Irvine does not have a farm.

Reason for excluding agricultural experiment station:

UC Irvine does not have an agricultural experiment station.

Narrative:

Currently celebrating its 50th anniversary, UCI is the youngest member of the prestigious Association of American Universities. The campus has produced three Nobel laureates and is known for its academic achievement, premier research, innovation and anteater mascot. Led by Chancellor Howard Gillman, UCI has more than 30,000 students and offers 192 degree programs. It's located in one of the world's safest and most economically vibrant communities and is Orange County's second-largest employer, contributing $4.8 billion

annually to the local economy. For more on UCI, visit

www.uci.edu

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Operational Characteristics

Criteria

n/a

Submission Note:

The size of the endowment, as reported here, reflects the market value of the University of California's endowment assets as of June 30, 2014. These are funds managed by the UC Regents.

"---" *indicates that no data was submitted for this field*

Endowment size:

7,413,710,000 *US/Canadian $*

Total campus area:

1,475 *Acres*

IECC climate region:

Hot-Dry

Locale:

Mid-size city

Gross floor area of building space:

10,766,160 *Gross Square Feet*

Conditioned floor area:

Floor area of laboratory space:

2,084,941 *Square Feet*

Floor area of healthcare space:

157,791 *Square Feet*

Floor area of other energy intensive space:

690,702 *Square Feet*

Floor area of residential space:

3,092,100 *Square Feet*

Electricity use by source::

	Percentage of total electricity use (0-100)
Biomass	0.20
Coal	1.80
Geothermal	0.20
Hydro	2.40
Natural gas	77.40
Nuclear	2.20
Solar photovoltaic	1.20
Wind	5.80
Other (please specify and explain below)	8.90

A brief description of other sources of electricity not specified above:

UC Irvine operates a steam turbine generator that is driven using the recovered heat from the combustion turbine. The steam turbine generator is only used when the campus heat load has been satisfied.

Energy used for heating buildings, by source::

	Percentage of total energy used to heat buildings (0-100)
Biomass	0
Coal	0
Electricity	1
Fuel oil	0
Geothermal	0

Natural gas	28
Other (please specify and explain below)	71

A brief description of other sources of building heating not specified above:

UC Irvine operates a combined heat and power plant. The heat recovered from the combustion turbine utilizing a heat recovery steam generator is routed to two heat exchangers. The recovered heat is then delivered to the campus in the form of 345 degree (F) high temperature water. The high-temp district energy loop provides for both building heating and domestic and industrial water heating.

Academics and Demographics

Criteria

n/a

Submission Note:

The academic divisions referenced in this credit include:
1. Claire Trevor School of the Arts
2. Francisco J. Ayala School of Biological Sciences
3. The Paul Merage School of Business
4. School of Education
5. The Henry Samueli School of Engineering
6. School of Humanities
7. Donald Bren School of Information and Computer Sciences
8. School of Law
9. School of Medicine
10. School of Physical Sciences
11. School of Social Ecology
12. School of Social Sciences
13. Program in Nursing Science
14. Department of Pharmaceutical Sciences
15. Program in Public Health

The number of non-credit students include those who enrolled in the following in 2012-2013: UC Irvine Extension, Access UCI (concurrent enrollment without formal admission to the University), and the Osher Lifelong Learning Institute for retirees and semi-retirees.

"---" *indicates that no data was submitted for this field*

Number of academic divisions:

15

Number of academic departments (or the equivalent):

77

Full-time equivalent enrollment:

28,266

Full-time equivalent of employees:

7,819

Full-time equivalent of distance education students:

1,129

Total number of undergraduate students:

24,489

Total number of graduate students:

4,869

Number of degree-seeking students:

29,358

Number of non-credit students:

3,059

Number of employees:

9,218

Number of residential students:

7,740

Number of residential employees:

1,426

Number of in-patient hospital beds:

0

Academics

Curriculum

This subcategory seeks to recognize institutions that have formal education programs and courses that address sustainability. One of the primary functions of colleges and universities is to educate students. By training and educating future leaders, scholars, workers, and professionals, higher education institutions are uniquely positioned to prepare students to understand and address sustainability challenges. Institutions that offer courses covering sustainability issues help equip their students to lead society to a sustainable future.

Credit
Academic Courses
Learning Outcomes
Undergraduate Program
Graduate Program
Immersive Experience
Sustainability Literacy Assessment
Incentives for Developing Courses
Campus as a Living Laboratory

Academic Courses

Responsible Party

Susan Coons
Program Coordinator
Office of Academic Initiatives

Criteria

Part 1

Institution offers sustainability courses and/or courses that include sustainability and makes an inventory of those courses publicly available.

Part 2

Institution's academic departments (or the equivalent) offer sustainability courses and/or courses that include sustainability.

In order to report and earn points for this credit, the institution must conduct a course inventory. The inventory should consist of two parts:

1) An inventory of sustainability courses that includes, at minimum, the title, department (or equivalent), and level of each course (i.e. undergraduate or graduate), as well as a brief description if the sustainability focus of the course is not apparent from its title

2) An inventory of other courses that include sustainability. The inventory includes, at minimum, the title, department (or the equivalent), and level of each course and a description of how sustainability is integrated into each course.

A course may be a sustainability course or it may include sustainability; no course should be identified as both:

• A sustainability course is a course in which the primary and explicit focus is on sustainability and/or on understanding or solving one or more major sustainability challenge (e.g. the course contributes toward achieving principles outlined in the Earth Charter).

• A course that includes sustainability is primarily focused on a topic other than sustainability, but incorporates a unit or module on sustainability or a sustainability challenge, includes one or more sustainability-focused activities, or integrates sustainability issues throughout the course.

For guidance on conducting a course inventory and distinguishing between sustainability courses and courses that include sustainability, see *Standards and Terms* and the Credit Example in the STARS Technical Manual. An institution that has developed a more refined approach to course classification may use that approach as long as it is consistent with the definitions and guidance provided.

Each institution is free to choose a methodology to identify sustainability courses that is most appropriate given its unique circumstances. Asking faculty and departments to self-identify sustainability courses and courses that include sustainability using the definitions outlined in *Standards and Terms* or looking at the stated learning outcomes and course objectives associated with each course may provide a richer view of sustainability course offerings than simply reviewing course descriptions, but it is not required.

This credit does not include continuing education and extension courses, which are covered by *EN 11: Continuing Education*.

Figures required to calculate the percentage of courses with sustainability content::

	Undergraduate	Graduate
Total number of courses offered by the institution	2,146	1,054
Number of sustainability courses offered	73	27
Number of courses offered that include sustainability	83	40

Number of academic departments (or the equivalent) that offer at least one sustainability course and/or course that includes sustainability (at any level):

27

Total number of academic departments (or the equivalent) that offer courses (at any level):

77

Number of years covered by the data:

Three

A copy of the institution’s inventory of its course offerings with sustainability content (and course descriptions):

2015_UCI Sustainability Course Inventory.pdf

An inventory of the institution's course offerings with sustainability content (and course descriptions):

Department, Course number and name provided below. Access above link for full inventory of UCI's course offerings with sustainability content (and course descriptions)

SUSTAINABILITY COURSES
DEPARTMENT COURSE NO. COURSE NAME
UNDERGRADUATE COURSES
1 Anthropology ANTHRO 20A People, Culture and Environmental Sustainability
2 Anthropology ANTHRO 30A Global Issues in Anthropological Perspective
3 Biological Sciences BIO SCI 9K Global Change Biology
4 Biological Sciences BIO SCI 23 Sustainable Landscaping
5 Biological Sciences BIO SCI 55 Introduction to Ecology
6 Biological Sciences BIO SCI E150 Conservation Biology
7 Biological Sciences BIO SCI 191A Senior Seminar on Global Sustainability
8 Biological Sciences BIO SCI 191B Senior Seminar on Global Sustainability II

9 Biological Sciences BIO SCI 191CW Writing/Senior Seminar on Global Sustainability III
10 Biological Sciences BIO SCI E197 Sustainability
11 Biological Sciences BIO SCI E199 Community Ecology
12 Chemical Engineering and Materials Science CBEMS 158 Ceramic Materials for Sustainable Energy
13 Chemistry H2A Honors General Chemisty
14 Civil and Environmental Engineering ENGRCEE 60 Contemporary and Emerging Environmental Challenges
15 Civil and Environmental Engineering ENGRCEE 125 Transportation and the Environment
16 Civil and Environmental Engineering ENGRCEE 160 Environmental Processes
17 Civil and Environmental Engineering ENGRCEE 162 Introduction to Environmental Chemistry
18 Civil and Environmental Engineering ENGRCEE 167 Ecology of Costal Waters
19 Civil and Environmental Engineering ENGRCEE 171 Water Resources Engineering
20 Civil and Environmental Engineering ENGRCEE 172 Groundwater Hydrology
21 Civil and Environmental Engineering ENGRCEE 173 Computer Tools for Watershed Model
22 Civil and Environmental Engineering ENGRCEE 176 Hydrology
23 Civil and Environmental Engineering ENGRCEE 181A Senior Design Practicum
24 Civil and Environmental Engineering ENGRCEE 181B Senior Design Practicum
25 Civil and Environmental Engineering ENGR CEE 181C Senior Design Practicum
26 Earth System Science EARTHSS 15 Introduction to Global Climate Change
27 Earth System Science EARTHSS 23 Air Pollution and Global Environment
28 Earth System Science EARTHSS 60A Earth and Environmental Science
29 Earth System Science EARTHSS 60B Local and Regional Environmental Issues
30 Earth System Science EARTHSS 60C Global Environmental Issues
31 Earth System Science EARTHSS 112 Global Climate Change
32 Earth System Science EARTHSS 148 Marine Ecosytems
33 Earth System Science EARTHSS 178 Solving the Energy Carbon Climate Problem
34 Earth System Science EARTHSS 180 Environmental Sustainability I
35 Earth System Science EARTHSS 182 Environmental Sustainability II
36 Earth System Science EARTHSS 190A Senior Seminar on Global Sustainability I
37 Earth System Science EARTHSS 190B Senior Seminar on Global Sustainability II
38 Earth System Science EARTHSS 190CW Writing/Senior Seminar on Global Sustainability III
39 Economics ECON 145E Economics of the Environment
40 Economics ECON 145FW Economics of the Environment II
41 European Languages and Studies GERMAN 130 Reading Nature: German Ecocriticism
42 Information and Computer Science I&C SCI 5 Global Disruption and Information Technology
43 International Studies INTL ST 122 Nuclear Environments
44 Mechanical and Aerospace Engineering ENGRMAE 110 Combustion and Fuel Cell Systems
45 Mechanical and Aerospace Engineering ENGRMAE 118 Sustainable Energy Systems
46 Mechanical and Aerospace Engineering ENGRMAE 164 Air Pollution and Control
47 Physics PHYSICS 14 Physics of Energy and the Environment
48 Planning, Policy & Design PP&D 100 Urban Disasters
49 Planning, Policy & Design PP&D 112 Foundations of Community Health
50 Planning, Policy & Design PP&D 131 Environmental Sustainability I
51 Planning, Policy & Design PP&D 132 Environmental Sustainability II
52 Planning, Policy & Design PP&D 139 Water Resource Policy
53 Planning, Policy & Design PP&D 152 Cultural Ecology and Environmental Design
54 Political Science POL SCI 41A Introduction to International Relations
55 Political Science POL SCI 129 Water Resource Policy
56 Public Health PUBHLTH 90 Natural Disasters

57 Public Health PUBHLTH 124 Environmental and Public Health Policy
58 Public Health PUBHLTH 125 Foundations of Community Health
59 Public Health PUBHLTH 163 Environmental Health Science
60 Public Health PUBHLTH 167 Air Pollution, Climate and Health
61 Public Health PUBHLTH 168 Nuclear Environments
62 Public Health PUBHLTH 171 Human Exposure to Environmental Contaminants
63 Public Health PUBHLTH 173 Health and Global Environmental Change
64 Social Ecology SOCECOL E127 Nuclear Environments
65 Social Ecology SOCECOL 186A Environmental Sustainability I
66 Social Ecology SOCECOL 186B Environmental Sustainability II
67 Social Ecology SOCECOL 186CW Writing/Senior Seminar on Global Sustainability III
68 University Studies UNI STU 13A Environmental Studies I
69 University Studies UNI STU 13B Environmental Studies II
70 University Studies UNI STU 13C Environmental Studies III
71 University Studies UNI STU 17 A Water l
72 University Studies UNI STU 17 B Water lI
73 University Studies UNI STU 17 C Water lll

GRADUATE COURSES
1 Chemistry CHEM 241 Issues Related to Tropospheric and Stratospheric Processes: Global Climate Change
2 Civil and Environmental Engineering ENGRCEE 264 Carbon Footprint Analysis for Water and Wastewater Systems
3 Civil and Environmental Engineering ENGRCEE 267 Ecology of Costal Waters, Graduate level
4 Civil and Environmental Engineering ENGRCEE 273 Computer Tools for Watershed Model, Graduate level
5 Civil and Environmental Engineering ENGRCEE 276 Hydrology, Graduate level
6 Civil and Environmental Engineering ENGRCEE 267 Coastal Ecology
7 Earth System Science EARTHSS 200 Global Physical Climate
8 Earth System Science EARTHSS 202 Climate Change
9 Earth System Science EARTHSS 224 Ocean Processes
10 Earth System Science EARTHSS 226 Land Surface Processes
11 Ecology and Evolutionary Biology ECO EVO 200B Plant-Animal Ecology
12 Informatics IN4MATX 273 Information Technology in Global Sustainability
13 Law LAW 553 Seminar International Environmental Law
14 Law LAW 578 Environmental Law
15 Law LAW 597AC Advanced Community and Economic Development Clinic
16 Law LAW 597AE Advanced Environmental Law Clinic
17 Law LAW 597C Community and Economic Development Clinic
18 Law LAW 597E Environmental Law Clinic
19 Law LAW 5788 Federal Public Land and Natural Resource Law
20 Mechanical and Aerospace Engineering ENGRMAE 218 Sustainable Energy Systems
21 Mechanical and Aerospace Engineering ENGRMAE 260 Issues Related to Tropospheric and Stratospheric Processes: Global Climate Change
22 Planning, Policy & Design PP&D 224 Environmental Politics and Policy
23 Planning, Policy & Design PP&D 231 Transportation and Environmental Health
24 Planning, Policy & Design PP&D 270 Environmental Ethics
25 Planning, Policy & Design PP&D 275 Planning & Public Health
26 Public Health PUBHLTH 264 Environmental Health Science
27 Social Ecology SOCECOL 200 Seminar on Social Ecology

COURSES THAT INCLUDE SUSTAINABILITY

DEPARTMENT COURSE NO. COURSE NAME

UNDERGRADUATE COURSES

1 African American Studies AFAM 128 Race, Gender & the Environment

2 Anthropology ANTHRO 125A Economic Anthropology

3 Anthropology ANTHRO 136D Conflict Management in Cross-Cultural Perspective

4 Biological Sciences BIO SCI 9E Horticultural Science

5 Biological Sciences BIO SCI H90 The Idiom and Practice of Science

6 Biological Sciences BIO SCI 94 From Organisms to Ecosystems

7 Biological Sciences BIO SCI E106 Processes in Ecology and Evolution

8 Biological Sciences BIO SCI E107 Seminar in Ecology and Evolutionary Biology

9 Biological Sciences BIO SCI E118 Ecosystems Ecology

10 Biological Sciences BIO SCI E120 Marine Biology

11 Biological Sciences BIO SCI E127 Physiological Plant Ecology

12 Biological Sciences BIO SCI E140 Evolution and Environment

13 Biological Sciences BIO SCI E151 Population Dynamics in Ecology Epidemiology & Medicine

14 Biological Sciences BIO SCI E166 Field Methods in Ecology

15 Biological Sciences BIO SCI E172 Plant Diversity

16 Biological Sciences BIO SCI E175 Restoration Ecology

17 Biological Sciences BIO SCI E179 Limnology Freshwater Ecology

18 Biological Sciences BIO SCI E182 Mediterranean-Type Ecosystems: Biodiversity and Conservation

19 Biological Sciences BIO SCI E186 Population and Community Ecology

20 Biological Sciences BIO SCI E189 Environmental Ethics

21 Civil and Environmental Engineering ENGRCEE 163 Biological Treatment Process Design

22 Civil and Environmental Engineering ENGR 189 ITE Project

23 Earth System Science EARTHSS 1 The Physical Environment

24 Earth System Science EARTHSS 3 Oceanography

25 Earth System Science EARTHSS 5 The Atmosphere

26 Earth System Science EARTHSS 7 Geology

27 Earth System Science EARTHSS 17 Catastrophes

28 Earth System Science EARTHSS 19 Introduction to Modeling the Earth System

29 Earth System Science EARTHSS 21 On Thin Ice: Climate Change and the Cryosphere

30 Earth System Science EARTHSS 51 Land Interactions

31 Earth System Science EARTHSS 53 Ocean Biogeochemistry

32 Earth System Science EARTHSS 55 Earth's Atmosphere

33 Earth System Science EARTHSS 110 Environmental Controversies

34 Earth System Science EARTHSS 144 Marine Geochemistry

35 Earth System Science EARTHSS 146 Consequences of Air Pollution

36 Earth System Science EARTHSS 164 Ecosystem Ecology

37 Earth System Science EARTHSS 168 Physiological Plant Ecology

38 Earth System Science EARTHSS 174 Ice in the Climate System

39 Economics ECON 143 Energy Economics

40 Economics ECON 152A Economic Anthropology

41 Economics ECON 157 Economic Development

42 History HISTORY 12 Native American Religions and Environmental Ethics

43 History HISTORY 21C World Since 1870 / World-War & Rights

44 History HISTORY 100W History & American West; Climate and Global Warming

45 History HISTORY 190 Nature, Environment, and Modern Europe
46 Informatics IN4MATX 161 Social Analysis of Computerization
47 International Studies INTL ST 183E Conflict Management in Cross-Cultural Perspective
48 Management MGMT 10 Business and Management in the World Today
49 Mechanical and Aerospace Engineering ENGRMAE 114 Fuel Cell Fundamentals and Technology
50 Philosophy PHILOS 131A Applied Ethics
51 Planning, Policy & Design PP&D 4 Introduction to Urban Studies
52 Planning, Policy & Design PP&D 40 Urban Sociology
53 Planning, Policy & Design PP&D 100 Food and Eating
54 Planning, Policy & Design PP&D 102 Urban Inequality
55 Planning, Policy & Design PP&D 107 Urban and Regional Planning
56 Planning, Policy & Design PP&D 108 Cities and Transportation
57 Planning, Policy & Design PP&D 110 Urban Economic Develpoment Policy
58 Planning, Policy & Design PP&D 113 Poverty in Developing Countries
59 Planning, Policy & Design PP&D 151 Environmental Psychology
60 Planning, Policy & Design PP&D 153 Elements of Environmental Design
61 Planning, Policy & Design PP&D 155 Urban Design Principles
62 Political Science POL SCI 154G Conflict Management in Cross-Cultural Perspective
63 Psychology and Social Behavior PSB 171S Environmental Psychology
64 Public Health PUBHLTH 2 Case Studies in Public Health
65 Public Health PUBHLTH 60 Environmental Quality and Health
66 Public Health PUBHLTH 151 Environmental Psychology
67 Public Health PUBHLTH 161 Environmental Geology
68 Public Health PUBHLTH 169 Human Exposure Modeling
69 Public Health PUBHLTH 179 Special Topics in Environmental and Global Health Science
70 Social Ecology SOCECOL E8 Introduction to Environmental Analysis and Design
71 Social Ecology SOCECOL 10 Environmental Geology
72 Social Science SOC SCI 5A Introduction to Human Geography
73 Social Science SOC SCI 5D U.S. and World Geography
74 Social Science SOC SCI 118G Regional Geography of California
75 Social Science SOC SCI 119 Geography of Global Economy
76 Social Science SOC SCI 183E Conflict Management in Cross-Cultural Perspective
77 Sociology SOCIOL 2 Introduction to Sociology
78 Sociology SOCIOL 3 Introduction to Social Problems
79 Sociology SOCIOL 43 Urban Sociology
80 Sociology SOCIOL 44 Births, Deaths, and Migration
81 Sociology SOCIOL 171 Environment and Society
82 University Studies UNI STU 3 Invasive Species
83 University Studies UNI STU 41 Global Village Seminar

GRADUATE COURSES
1 Biological Sciences BIO SCI 205A Topics in Ecology
2 Chemistry CHEM 245 Atmospheric Chemistry of the Natural and Polluted Troposphere
3 Civil and Environmental Engineering ENGRCEE 261 Applied and Environmental Microbiology
4 Civil and Environmental Engineering ENGRCEE 263 Advanced Biological Treatment Processes
5 Civil and Environmental Engineering ENGRCEE 265 Advanced Physical-Chemical Treatment Processes
6 Civil and Environmental Engineering ENGRCEE 266 Biotechnology of Wastewater
7 Civil and Environmental Engineering ENGRCEE 272 Groundwater Hydrology
8 Civil and Environmental Engineering ENGRCEE 273 Watershed Modeling

9 Civil and Environmental Engineering ENGRCEE 276 Hydrology
10 Civil and Environmental Engineering ENGRCEE 289 Analysis of Hydrologic Systems
11 Criminology, Law, and Society CRM/LAW C207 Development Control Law and Policy
12 Earth System Science EARTHSS 212 Geoscience Modeling and Data Analysis
13 Earth System Science EARTHSS 228 Geophysical Fluid Dynamics
14 Earth System Science EARTHSS 232 Terrestrial Hydrology
15 Earth System Science EARTHSS 240 Atmospheric Chemistry and Physics
16 Earth System Science EARTHSS 266 Global Biological Change
17 Earth System Science EARTHSS 282A Special Topics in Climate
18 Earth System Science EARTHSS 286A Special Topics in Biogeochemistry
19 Earth System Science EARTHSS 286B Special Topics in Biogeochemistry
20 Earth System Science EARTHSS 290 Seminar
21 Earth System Science EARTHSS 298 Practicum in Earth System Science
22 Earth System Science EARTHSS 299 Research
23 Ecology and Evolutionary Biology ECO EVO 230 Seminar on Social Ecology
24 Informatics IN4MATX 241 Introduction to Ubiquitous Computing
25 Law LAW 5i7 Property Law
26 Law LAW 5633 Biotechnology and The Law
27 Law LAW 5656 Regulatory Design and Innovation
28 Law LAW 5657 Animal Law
29 Management MGMT FE 206 Business and Government
30 Management MGMT MBA 206 Business and Government
31 Management MGMT MBA 246A Introduction to the Real Estate Process
32 Mechanical and Aerospace Engineering ENGRMAE 214 Fuel Cell Fundamentals and Technology
33 Mechanical and Aerospace Engineering ENGRMAE 261 Air Quality Modeling
34 Planning, Policy & Design PP&D 207 Development Control Law and Policy
35 Planning, Policy & Design PP&D 212 Transportation Planning
36 Planning, Policy & Design PP&D 235 Geographic Information Systems (GIS) Problem Solving in Planning
37 Planning, Policy & Design PP&D 244 Land-Use Policy
38 Planning, Policy & Design PP&D 273 Global Urbanization
39 Public Health PUBHLTH 278 Industrial Toxicology
40 Sociology SOCIOL 262A Population

The website URL where the inventory of course offerings with sustainability content is publicly available:

http://initiatives.provost.uci.edu/wp-content/uploads/2015/02/2015_UCI-Sustainability-Course-Inventory.pdf

A brief description of the methodology the institution followed to complete the course inventory:

SUSTAINABILITY COURSE INVENTORY METHODOLOGY (2015)

In Fall 2011, the Manager of Special Projects in the Office of the Vice Chancellor for Administrative and Business Services at UCI compiled the initial list of environment and sustainability courses from the 2011-2012 UCI course catalog. In Winter 2012, the UCI Environment Institute convened a Sustainability Curriculum Assessment Team (SCAT) comprised of 15 student volunteers to apply the new faculty-established definition of sustainability in the curriculum to the previously compiled course list to distinguish courses that were sustainability-focused, sustainability-related, and not related to sustainability; these results were cross-checked against a preliminary sustainability curriculum assessment carried out by a 2007 Subcommittee of the UCI Sustainability Committee. In February 2013, the

UCI Environment Institute re-assessed the 2012 sustainability course list by contacting each academic department to determine if the courses were currently offered and to identify new sustainability course offerings or ones that may have been missed in 2012. In 2014 the sustainability course inventory was again updated to ensure that all courses listed had been offered within the three-year period from AY 2011-12 through AY 2013-14 and to identify and evaluate any new course offerings. Review of the courses was completed by the Student Advisory Council on Sustainability Education (SACSE) under the direction of the Sustainability Initiative.

The 2015 Sustainability Course Inventory of sustainability courses and courses that include sustainability reflects unique courses offered during the most recent three academic years (Fall, Winter, Spring): AY 2012-13, AY 2013-14, and AY 2014-15. Academic courses that were offered at least once during the three-year period are included in the sustainability course listings. Undergraduate and graduate-level course inventories were compiled separately.

The methodology used to identify course to be included in the 2015 Sustainability Course Inventory is summarized below:
• All courses listed in the 2014 inventory were reviewed: courses that had been listed in the 2014 sustainability course inventory but were not offered in AY 2012-13, AY 2013-14, and AY 2014-15 were eliminated; courses that had been eliminated from the 2014 inventory but were offered in AY 2014-15 were added.
• A list of all newly approved or modified courses (since January 1, 2014) was provided by the Registrar's office and evaluated for this assessment based on the definitions provided in the STARS 2.0.1 Technical Manual. New courses were reviewed by SACSE under the direction of the UCI Sustainability Initiative. Courses that met the criteria for sustainability courses or courses that include sustainability were added to the inventory provided that they were offered in the established three-year time period.
• Courses that have been approved by the faculty advisory board for the interdisciplinary minor in Global Sustainability and the B.A. in Environmental Science, but not previously included in the sustainability course inventories, were reviewed. Provided that the courses had been offered during the three-year period, required courses were included in the inventory of sustainability courses, and approved electives were included in the inventory of courses that include sustainability.
• Finally, the UCI Sustainability Initiative administered a survey to all faculty to identify any sustainability courses or courses that include sustainability that may have been missed. Definitions provided in the STARS 2.0.1 Technical Manual were included in the survey. Identified courses that met the sustainability evaluation criteria were included in the inventory.

The UCI Office of Institutional Research (OIR) compiled the total number of unique courses offered at UCI for each of the three academic years (Fall/Winter/Spring): AY 2012-13, AY 2013-14, and AY 2014-15. An average of the three academic years was used for the total number of courses offered annually by UCI over the three-year period. Medical School courses were not included in the inventory or the course count.

Each unique course was counted as a single course. Only primary courses were counted; secondary courses (e.g., labs, discussions, independent study, etc.) were not included. Courses with multiple offerings within a year or courses that are offered annually were counted as one unique course over the three-year period. Courses with the same general number but with unique course designations (e.g., ESS 60A and ESS 60B, for which ESS 60A is a prerequisite) were counted individually. Courses cross-listed in multiple departments with unique course numbers were counted as separate courses. Summer courses were not included in the inventories.

How did the institution count courses with multiple offerings or sections in the inventory?:

Each course was counted as a single course regardless of the number of offerings or sections

A brief description of how courses with multiple offerings or sections were counted (if different from the options outlined above):

Description of how courses with multiple offerings or sections were counted is included in the methodology summarized above.

Which of the following course types were included in the inventory?:

	Yes or No
Internships	No
Practicums	Yes
Independent study	No
Special topics	Yes
Thesis/dissertation	No
Clinical	No
Physical education	No
Performance arts	Yes

Does the institution designate sustainability courses in its catalog of course offerings?:

No

Does the institution designate sustainability courses on student transcripts?:

No

Learning Outcomes

Responsible Party

Susan Coons
Program Coordinator
Office of Academic Initiatives

Criteria

Institution's students graduate from degree programs that include sustainability as a learning outcome or include multiple sustainability learning outcomes. Sustainability learning outcomes (or the equivalent) may be specified at:

- Institution level (e.g. covering all students)
- Division level (e.g. covering one or more schools or colleges within the institution)
- Program level
- Course level

This credit includes graduate as well as undergraduate programs. For this credit, "degree programs" include majors, minors, concentrations, certificates, and other academic designations. Extension certificates and other certificates that are not part of academic degree programs do not count for this credit; they are covered in *EN 11: Continuing Education*. Programs that include co-curricular aspects may count as long as there is an academic component of the program. Learning outcomes at the course level count if the course is required to complete the program.

This credit is inclusive of learning outcomes, institutional learning goals, general education outcomes, and graduate profiles that are consistent with the definition of "sustainability learning outcomes" included in Standards and Terms.

Institutions that do not specify learning outcomes as a matter of policy or standard practice may report graduates from sustainability-focused programs (i.e. majors, minors, concentrations and the equivalent as reported for *AC 3: Undergraduate Program* and *AC 4: Graduate Program*) in lieu of the above criteria.

Submission Note:

UC Irvine posts learning outcomes for undergraduate degree programs. In responding to this credit, UC Irvine elected to focus on the undergraduate degree programs. The numbers of graduates reported for this credit reflect degrees awarded in the 2013-2014 Fall-to-Summer Degree Year:
• Aggregated number of students awarded a Bachelor's degree from a program with at least one sustainability learning outcome, i.e., students awarded degrees from the programs listed above; and
• Total number of graduates awarded Bachelor's degrees from all UC Irvine degree programs in the Claire Trevor School of the Arts, The Paul Merage School of Business, The Henry Samueli School of Engineering, and the Donald Bren School of Information and Computer Sciences; the Schools of Biological Sciences, Humanities, Physical Sciences, Social Ecology, and Social Sciences; and the Programs in Nursing Science, Pharmaceutical Sciences, and Public Health.

Since 2008 the Division of Undergraduate Education has sponsored the Assessment Grant Program to support faculty-based activities to assess student learning in undergraduate majors and in general education. The program provides funding for Senate faculty members to either advance a department's assessment program for an undergraduate major or develop an assessment program for one of the general

education student learning outcomes.

As part of a broader effort to ensure that the graduate programs are cutting edge in both content and form and to maximize student success, UC Irvine is developing and assessing Program Learning Outcomes (PLOs) for all graduate programs. Unlike student learning outcomes, which focus on whether or not students have mastered particular concepts and skills, PLOs state the described outcomes of graduate programs and assessment is focused on what the program has accomplished. During the 2011-2012 academic year, a PLO pilot project was launched and the Graduate Council developed guidelines to assist in development of specific learning outcomes for each graduate program, along with evaluative measures. Five departments developed PLO documents and assessment plans that could serve as models for the rest of the campus. In 2012-2013, the Graduate Council required that all graduate programs begin to define program learning outcomes while the pilot working group moved forward with assessment. In 2013-2014, graduate programs were expected to begin to assess PLOs, with an eye to gathering data that will allow programs to make targeted improvements. Resources to support assessment efforts are being provided through the Division of Undergraduate Education's Assessment Grant Program, which has been expanded to include graduate-level assessment projects.

"---" *indicates that no data was submitted for this field*

Number of students who graduated from a program that has adopted at least one sustainability learning outcome:

3,168

Total number of graduates from degree programs:

6,307

A copy of the list or inventory of degree, diploma or certificate programs that have sustainability learning outcomes:

A list of degree, diploma or certificate programs that have sustainability learning outcomes:

The following undergraduate degree programs have adopted at least one sustainability learning outcome.
1) B.S. in Biochemistry and Molecular Biology
2) B.S. in Biological Sciences
3) B.S. in Developmental and Cell Biology
4) B.S. in Ecology and Evolutionary Biology
5) B.S. in Genetics
6) B.S. in Microbiology and Immunology
7) B.S. in Neurobiology
8) B.S. in Plant Biology
9) B.S. in Aerospace Engineering
10) B.S. in Biomedical Engineering
11) B.S. in Biomedical Engineering: Premed
12) B.S. in Chemical Engineering
13) B.S. in Civil Engineering
14) B.S. in Computer Engineering
15) B.S. in Electrical Engineering
16) B.S. in Engineering
17) B.S. in Environmental Engineering

18) B.S. in Materials Science Engineering
19) B.S. in Mechanical Engineering
20) B.S. Computer Science and Engineering
21) B.S. in Informatics
22) B.S. in Chemistry
23) B.A. in Business Administration
24) B.A. in Business Information Management
25) B.S. in Earth and Environmental Sciences
26) B.S. in Earth System Science
27) B.A. in Environmental Science
28) B.A. in Global Cultures
29) B.A. in Comparative Literature
30) B.A. in Philosophy
31) B.A. in Drama
32) B.A. in Public Health Policy
33) B.S. in Public Health Sciences
34) B.A. in Social Ecology
35) B.A. in Urban Studies
36) B.A. in Social Science
37) B.A. in Anthropology
38) B.A. in Economics
39) B.A. in International Studies

A list or sample of the sustainability learning outcomes associated with degree, diploma or certificate programs (if not included in an inventory above):

Sample sustainability learning outcomes for UC Irvine degrees programs are listed below:
1) BA in Environmental Science:
“The Environmental Science program provides students with a solid foundation to recognize the impacts of human activities on the environment, and in turn the impacts of environmental change on society. Students will understand the mechanisms by which key institutions, policies, and regulations impact ecosystems and the physical environment.”
2) B.A. in Urban Studies:
"Analyze interconnections among the physical, environmental, social, economic, and political dimensions of cities and urban life."
3) B.S. in Earth System Science
“Students learn to apply basic sciences (physics, chemistry, mathematics, and biology) to understand the major processes and systems governing the Earth’s climate, biogeochemical cycles, and global change.”
4) B.S. degrees in Engineering:
"An ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability."

The website URL where information about the institution’s sustainability learning outcomes is available:

http://assessment.uci.edu/assessment/academic-program-student-learning-outcomes-2/

Undergraduate Program

Responsible Party

Susan Coons
Program Coordinator
Office of Academic Initiatives

Criteria

Institution offers at least one:

• Sustainability-focused program (major, degree program, or equivalent) for undergraduate students

And/or

• Undergraduate-level sustainability-focused minor or concentration (e.g. a concentration on sustainable business within a business major).

Extension certificates and other certificates that are not part of academic degree programs do not count for this credit; they are covered in *EN 11: Continuing Education*.

Submission Note:

In addition to the undergraduate programs listed above that meet the definition of sustainability-focused (B.A in Environmental Science, Minor in Global Sustainability), UC Irvine offers a number of other sustainability-related degree programs and minors, including those listed below.

DEGREE PROGRAMS (sustainability-related):
B.A. Social Ecology
(
http://socialecology.uci.edu/core/undergraduate-program
)
B.A. Urban Studies
(
http://students.soceco.uci.edu/pages/urban-studies-major
)
B.A. Public Health Policy
(
http://publichealth.uci.edu//ph_docs/new_ugrad/phmajor
)
B.S. Earth System Science
(
http://www.ess.uci.edu/undergrad/bs
)
B.S. Ecology & Evolutionary Biology
(

http://ecoevo.bio.uci.edu/undergrad/index.html
)
B.S. Civil Engineering
(
http://plaza.eng.uci.edu/degree-program/civil
)
B.S. Environmental Engineering
(
http://plaza.eng.uci.edu/degree-program/environmental
)
B.S. Public Health Science
(
http://publichealth.uci.edu//ph_docs/new_ugrad/phmajor
)

MINORS (sustainability-related):
Minor in Earth and Atmospheric Sciences
(
http://www.ess.uci.edu/undergrad/eas
)
Minor in Civic and Community Engagement
(
http://www.due.uci.edu/engagement_minor/
)
Minor in Public Health
(
http://publichealth.uci.edu/ph_docs/new_ugrad/phminor
)
Minor in Social Ecology (
http://socialecology.uci.edu/files/students/undergrad/SEminors.pdf
)
Minor in Urban Studies
(
http://socialecology.uci.edu/files/students/undergrad/SEminors.pdf
)

"---" *indicates that no data was submitted for this field*

Does the institution offer at least one sustainability-focused major, degree program, or the equivalent for undergraduate students?:

Yes

The name of the sustainability-focused, undergraduate degree program (1st program):

B.A. in Environmental Science

A brief description of the undergraduate degree program (1st program):

Program highlights of the B.A. in Environmental Science in the Earth System Science Department include:
- Scientific, socioeconomic, and policy aspects of environmental problems
- Classes in local and global environmental issues, sustainability, and climate change
- Senior project in sustainability
- Preparation for careers in government, non-profit, and private industry that involve both science and policy

Topics such as the Gulf Oil Spill, Global Climate Change, Drought and Water Supply illustrate the continuing need for environmental professionals with training in the natural sciences, social sciences, economics, and public policy. The Environmental Science Bachelor of Arts degree program prepares students interested in environmental problem solving by linking an understanding of natural science with socioeconomic factors and public policy. The curriculum combines a quantitative understanding of environmental science, chemistry, and biology with studies of social science, policy, and macro- and microeconomics to provide a foundation for careers in environmental policy, resource management, education, environmental law, and related fields.

The Environmental Science degree program provides students with a solid foundation to recognize the impacts of human activities on the environment, and in turn the impacts of environmental change on society. Students will understand the mechanisms by which key institutions, policies, and regulations impact ecosystems and the physical environment. Once the core course work is complete, students are encouraged to focus on a particular area within Environmental Science and to choose electives that build a coherent core of knowledge. Focus areas include, but are not limited to planning, policy and design, sociology, economics, climatology, water resources, water quality, air pollution, resource management, and atmospheric sciences. The B.A. degree prepares students for careers in environmental policy, resource management, education, environmental law and related fields. Students learn to understand the mechanisms by which key institutions, policies and regulations impact ecosystems and the physical environment.

The website URL for the undergraduate degree program (1st program):

http://www.ess.uci.edu/undergrad/ba

The name of the sustainability-focused, undergraduate degree program (2nd program):

A brief description of the undergraduate degree program (2nd program):

The website URL for the undergraduate degree program (2nd program):

The name of the sustainability-focused, undergraduate degree program (3rd program):

A brief description of the undergraduate degree program (3rd program):

The website URL for the undergraduate degree program (3rd program):

The name and website URLs of all other sustainability-focused, undergraduate degree program(s):

Does the institution offer one or more sustainability-focused minors, concentrations or certificates for undergraduate students?:

Yes

The name of the sustainability-focused undergraduate minor, concentration or certificate (1st program):

Minor in Global Sustainability

A brief description of the undergraduate minor, concentration or certificate (1st program):

The interdisciplinary Minor in Global Sustainability trains students to understand the changes that are needed for the human population to live in a sustainable relationship with the resources available on this planet. The Global Sustainability minor is listed under Interdisciplinary Studies and receives academic oversight from the Departments of Earth System Science, Ecology & Evolutionary Biology, and Planning, Policy & Design. The minor is open to all UC Irvine students.

As a result of population growth and the pursuit of higher standards of living, humanity has initiated many global trends that cannot be sustained indefinitely. Some of these trends are physicochemical in nature, such as the rapid depletion of fossil fuels and the increasing pollution of our environment, including the accumulation of ozone-depleting chemicals with consequent increase of ultraviolet radiation at the Earth's surface, and the buildup of atmospheric carbon dioxide and other molecules that are instrumental in exacerbating global warming. Other trends are biological ones including the degradation of agricultural land, the destruction of many kinds of wildlife habitat with associated high rates of species extinction, and the depletion of wildlife populations by over-exploitation. Global changes are also taking place in human societies including loss of cultural diversity, a growing income gap between rich and poor nations leading to deepening poverty and additional pressure for biological resource exploitation, accelerating urbanization with associated social problems, and regional population and economic imbalances leading to escalating political tensions and potential for conflict. This program examines the causes and interrelationships of these problems and considers new approaches to solving them. Its goal is to provide broad, interdisciplinary training that will allow students to better understand and effectively deal with the serious environmental problems that we will face in the 21st century.

The website URL for the undergraduate minor, concentration or certificate (1st program):

http://catalogue.uci.edu/interdisciplinarystudies/globalsustainability/

The name of the sustainability-focused undergraduate minor, concentration or certificate (2nd program):

A brief description of the undergraduate minor, concentration or certificate (2nd program):

The website URL for the undergraduate minor, concentration or certificate (2nd program):

The name of the sustainability-focused undergraduate minor, concentration or certificate (3rd program):

A brief description of the undergraduate minor, concentration or certificate (3rd program):

The website URL for the undergraduate minor, concentration or certificate (3rd program):

The name, brief description and URL of all other undergraduate-level sustainability-focused minors, concentrations and certificates:

Graduate Program

Criteria

Institution offers at least one:

• Sustainability-focused program (major, degree program, or equivalent) for graduate students

And/or

• Graduate-level sustainability-focused minor, concentration or certificate (e.g. a concentration on sustainable business within an MBA program).

Extension certificates and other certificates that are not part of academic degree programs do not count for this credit; they are covered in *EN 11: Continuing Education*.

This credit was marked as **Not Pursuing** so Reporting Fields will not be displayed.

Immersive Experience

Responsible Party

Susan Coons
Program Coordinator
Office of Academic Initiatives

Criteria

Institution offers at least one immersive, sustainability-focused educational study program. The program is one week or more in length and may take place off-campus, overseas, or on-campus.

For this credit, the program must meet one or both of the following criteria:

- It concentrates on sustainability, including its social, economic, and environmental dimensions

  And/or

- It examines an issue or topic using sustainability as a lens.

For-credit programs, non-credit programs and programs offered in partnership with outside entities may count for this credit. Programs offered exclusively by outside entities do not count for this credit.

See the Credit Example in the STARS Technical Manual for further guidance.

Submission Note:

UC Irvine provides many opportunities for students to participate in sustainability-focused immersive experiences. Off-campus programs that offer 7-10 day immersive experiences include: Alternative Spring Break programs, UCI Global Brigade chapters, Engineers Without Borders. In addition, sustainability-focused experiences may be sponsored through the Undergraduate Research Opportunities Program and the Social Ecology Field Work Program. Field research experiences may also be available through research programs in Biological Sciences, Physical Sciences, and other schools on campus. Website URLs with additional information about several specific sustainability-focused immersive programs are included in the descriptions provided above.

The Global Sustainability Resource Center continues to develop year-long student opportunities that integrate equity, ecology, and economy through three sustainability pathways: campus as a living lab pathway, organizing pathway, and the communiversity pathway. These flexible pathways provide students with practical experience, training, and connection to internal and external activities in these broad areas.

"---" *indicates that no data was submitted for this field*

Does the institution offer at least one immersive, sustainability-focused educational study program that meets the criteria for this credit?:

Yes

A brief description of the sustainability-focused immersive program(s) offered by the institution:

1) UC Irvine Costa Rica Program: Global Sustainability and Cultural Immersion (

http://sites.uci.edu/costaricaprogram/

):
The UC Irvine Costa Rica Program is an alternative-break experience sponsored by Student Housing and the Division of Student Affairs in partnership with the Division of Undergraduate Education. The program allows 15-20 UC Irvine students to experience a global sustainability and cultural immersion program leading to increased cultural competence and global leadership development. The participants serve as diplomatic ambassadors for the university as they immerse themselves in the community and culture of Costa Rica.

The program includes a 2-unit course in Winter Quarter, which lays the groundwork for the immersion trip and covers topics including: Costa Rican culture, cultural competency skills, personal identity, trip logistics, expectations, academic study topic preparation, and team building. Students participate in a field trip to the UCI Arboretum where they experience local nature and wildlife in Irvine, creating a basis for comparison once in-country. Early in the quarter, students go on an overnight retreat, within Orange County, designed to continue preparation for the Costa Rica experience.

During spring break, students travel to Costa Rica where the in-country portion begins with a visit to the rural farm village of Mastatal and a stay at Siempre Verde, an environmental learning center specializing in organic farming and sustainable development. Students experience open-air living, farm-to-table organic meals, composting toilets, outdoor showers and rural daily life. They also have the opportunity to visit two other environmental learning centers, Rancho Mastatal and Villas Mastatal, that specialize in sustainable building, research and living and allow students to explore rural community structure, tropical ecology, medicinal plant use, Costa Rican education, sustainable chocolate farming, reforestation, ecotourism, sustainable development & building, indigenous issues and composting. While in Mastatal, students also participate in service projects for the community. Most recently, students continued work on a greenhouse at the local primary school, which was constructed using sustainable material (bamboo grown in the forest) by last year's program students.

2) Spring Break in the Desert Program: (

http://sites.uci.edu/saltonsea/blog-and-news/

)
The UC Irvine Spring Break in the Desert is an alternative spring break program that gives students the opportunity to learn about the human, political, economic, and environmental challenges of the Salton Sea and Anza-Borrego Desert region. Initiated in 2014, the UC Irvine program is led by the Salton Sea Initiative, an interschool initiative addressing long-term sustainability issues in the Salton Sea region, and the Center for Environmental Biology. Up to 12 undergraduate students from a variety of backgrounds (conservation, sustainability, urban planning, social justice, humanities, fine arts, science, and engineering) are invited to participate and develop their skills in education, social justice, sustainability, and conservation. The week-long field program takes place during spring break in late March; no credit is received for participation. Students with prior experience in the program serve to lead activities in subsequent years, fostering a student-centered knowledge base and co-teaching. Prior to the field program, students and advisors host two orientation meetings to introduce participants to the Imperial Valley region and discuss the logistics and responsibilities of the program. No credit is received for participation.

Based at the Steele-Burnand Desert Research Station in Borrego Springs, program participants spend the first days learning about desert ecology and sustainability through interactive talks, hikes with State Park rangers, tours of the Visitor's Center and Paleontology Lab at Anza-Borrego Desert State Park, and a driving tour of the Salton Sea. The remainder of the program involves education and outreach activities at the Salton Sea, Borrego Springs schools, and the State Park. Specific activities may include giving presentations and leading

hands-on projects on the Salton Sea, leading round-table discussions on sustainability, advising high school students on science fair projects and sharing the experience of being at UC Irvine, meeting with community organizations to discuss local health and equity challenges in the Imperial and Coachella Valleys, doing maintenance and grounds-keeping activities at the State Park (e.g., removal of invasive weeds); or assisting with the work of local soup kitchens.

3) Global Brigades (

http://news.uci.edu/features/foot-soldiers-in-the-war-on-poverty/

):
Global Brigades is the world's largest student-led global health and sustainable development organization. Since 2007, UC Irvine has established six chapters of Global Brigades on campus: dental, environmental, medical, micro-finance, public health and water. UCI students in the Global Brigades program have participated in immersive experiences of seven to ten days during summer, spring and winter breaks. The Global Public Health Brigade and Global Environmental Brigade have most recently provided immersive experiences for UCI students in Honduras and Panama. In Honduras, UCI students worked with locals to install eco-stoves, latrines, water storage units and concrete floors. The stoves replace traditional wood-burning ones that emit harmful smoke particles and soot, reducing indoor air pollution; concrete floors cut down on dust contamination and the transmission of Chagas disease by dirt-dwelling insects; latrines allow for sanitary waste disposal; and water storage units provide sources of clean water. They also conducted a public health workshop for children and participated in a community assessment where they observed past and present construction projects and collaboratively discussed ways to improve future projects. Toward the end of the trip, they visited orphanages to distribute hygienic and educational supplies collected throughout the school year. In Panama, students worked to mitigate ecological degradation and develop sustainable environmental practices through projects such as environmental educational workshops & curriculum, greenhouse establishments, native species reforestation, eco-stove and composite toilet construction, and slow-sand water filter development.

4) Summer Undergraduate Research Program (

http://www.urop.uci.edu/SURP.html

):
UC Irvine's Undergraduate Research Opportunities Program administers the Summer Undergraduate Research Program (SURP), which provides students with the opportunity to become immersed in a research topic full-time over a 10-week period or the equivalent of 400 hours. Students define their own research objectives, which can be sustainability focused. SURP is open to all non-graduating UCI undergraduates who are in good academic standing and who have been involved in a faculty-mentored research project or creative activity for at least one quarter before the beginning of the Summer.

5) Social Ecology Field Study (

http://students.soceco.uci.edu/pages/field-study-catalog

):
The School of Social Ecology requires its students to participate in the field study program, which includes 10-20 hours per week of public service in exchange for academic credit, with an academic component. The program offers students opportunities to choose sustainability-related field study placements.

The website URL where information about the immersive program(s) is available:

Sustainability Literacy Assessment

Responsible Party

Susan Coons
Program Coordinator
Office of Academic Initiatives

Criteria

Institution conducts an assessment of the sustainability literacy of its students. The sustainability literacy assessment focuses on knowledge of sustainability topics and may also address values, behaviors and/or beliefs. Assessments that focus exclusively on values, behaviors and/or beliefs are not sufficient to earn points for this credit.

Institution may conduct a follow-up assessment of the same cohort group(s) using the same instrument.

This credit includes graduate as well as undergraduate students.

"---" indicates that no data was submitted for this field

The percentage of students assessed for sustainability literacy (directly or by representative sample) and for whom a follow-up assessment is conducted:

0.74

The percentage of students assessed for sustainability literacy (directly or by representative sample) without a follow-up assessment:

0.50

A copy of the questions included in the sustainability literacy assessment(s):

UCI Sustainability Literacy Assessment_Survey.pdf

The questions included in the sustainability literacy assessment(s) :

A brief description of how the assessment(s) were developed:

The Sustainability Literacy Assessment has been conducted repeatedly as part of the Sustainability I course offered through the School of Social Ecology's Planning, Policy, and Design Department. The sustainability assessment was developed by Teaching Assistant Sally Geislar, Professor Richard Matthew, and Center for Unconventional Security Affairs (CUSA) researchers. The survey was designed to capture changes in ecoliteracy, attitudes, values and personal behaviors as a result of participating in the course lectures, projects, extra credit events and coursework.

The surveys collected both quantitative and qualitative responses from students. Survey questions were compiled and developed using a series of existing questions and scales in the Environmental Psychology field, environmental education and polling foundations, and environmental non-profit sources. The section on ecoliteracy was based on a 17-question survey, developed by the National Environmental Education and Training Foundation and Roper Public Affairs, intended to measure Americans' knowledge, behavior and attitudes related to the environment. Questions on attitudes reflect an abbreviated version of the New Ecological Paradigm (NEP) developed by Riley Dunlap and William R. Catton Jr. in the 1970s and used widely since then. To capture values related to environmental concern, an abridged version of scales developed by Paul C. Stern was compiled. Finally, to assess personal behaviors related to the environment, questions were collected from Florian Kaiser's General Ecological Behavior scale as well as the sustainability behavior change program of a non-profit organization called Community Sustainability USA, Inc.

A brief description of how the assessment(s) were administered:

The initial (pre-test) and follow-up (post-test) surveys were administered to the same cohort by TAs in each of the 2013-2015 Sustainability I courses; assessment data were complied at the end of the course. The first pre-test survey and post-test follow-up were administered during the Winter 2013 Quarter; subsequent sustainability literacy assessments were administered during the 2014 and 2015 Winter Quarters, using the survey developed in 2013.

Using a pre-test, post-test methodology, students completed the pre-test survey before exposure to the treatment; in this case, the Sustainability I course itself is considered the treatment or intervention. To assess change over time, the responses of students who completed the survey prior to the first class were matched and compared to their post-test survey responses. Unfortunately, a control group was not able to be established for comparisons with the treatment group. Students enrolled in the Sustainability I Winter course were asked to complete the online survey before attending the first class to capture the baseline ecoliteracy, attitudes, values and personal behaviors prior to exposure to the course (or intervention). Credit was given for completion of the survey, regardless of response content. Students received the post-survey on the final day of the 10-week course, and had one week to complete the survey for credit. The post-test survey reflects the questions in the pre-test to enable analysis of change over time.

A brief summary of results from the assessment(s):

The percentages of students assessed for sustainability literacy (with and without a followup assessment) that are reported for this credit are an average of the data for 2013 and 2014. Data for the 2015 sustainability literacy assessment are not yet available to report.

Winter 2015
In the Winter 2015 Quarter, a total of 198 students enrolled in the Sustainability I course participated in the sustainability literacy survey in Winter 2015. This represents 0.68% of the total UCI population. As the Winer 2015 Quarter has not yet ended, these students have not received the follow-up assessment; it will be administered before the end of the quarter (March 20,2015)

Winter 2014
In the Winter 2014 Quarter, total of 206 students enrolled in the Sustainability I course participated in the sustainability literacy survey. Of the 206 students who completed the pre-test survey, 166 students completed the post-test survey. Students who completed both pre-test and post-test survey in 2014 represent 0.63% of the total UCI student population; students who completed only the pre-test survey in 2014 represent 0.15% of the total UCI student population. Analysis of the ecoliteracy section assessed the improvement of accurate responses by students before and after the course. The course average for the ecoliteracy section changed from 73% to 97% before and after the course, respectively. This represents a statistically significant change with a p-value p=0.000 on a standardized paired sample t-test. A scale was calculated after accounting for reverse coded questions for each of the sections: pro-environmental behavior and food, purchasing, waste, and driving behaviors. For each scale a standardized paired sample t-test was calculated to test the change from pre-test to post-test. Students revealed a statistically significant change in some of these sections. Students reported more sustainable behavior in food purchasing (p=.08) and waste practices (p=.005). Driving, sustainable purchasing, and pro-environmental behaviors did

not show statistically significant changes.

Winter 2013
In the Winter 2013 Quarter, A total of 210 Sustainability I students participated in the sustainability literacy assessment, completing both the pre-test and post-test surveys. This represents 0.84% of the total UCI student population. Analysis of the ecoliteracy section assessed the improvement of accurate responses by students before and after the course. Of the values, attitudes, and environmental behavior questions asked of students, only the mean student scores on the ecoliteracy survey were significantly higher at the end of the course than before the course began in the Winter 2013 Quarter at UC Irvine. A standardized paired sample t-test was run to determine this result using SPSS20. The student average was 74% before the quarter began and 77.5% at the end of the quarter, with a p value of p = .002.

The website URL where information about the literacy assessment(s) is available:

Incentives for Developing Courses

Criteria

Institution has an ongoing program or programs that offer incentives for faculty in multiple disciplines or departments to develop new sustainability courses and/or incorporate sustainability into existing courses or departments. The program specifically aims to increase student learning of sustainability.

Incentives may include release time, funding for professional development, and trainings offered by the institution.

Incentives for expanding sustainability offerings in academic, non-credit, and/or continuing education courses count for this credit.

This credit was marked as **Not Pursuing** so Reporting Fields will not be displayed.

Campus as a Living Laboratory

Criteria

Institution is utilizing its infrastructure and operations for multidisciplinary student learning, applied research and practical work that advances sustainability on campus in at least one of the following areas:

- Air & Climate
- Buildings
- Dining Services/Food
- Energy
- Grounds
- Purchasing
- Transportation
- Waste
- Water
- Coordination, Planning & Governance
- Diversity & Affordability
- Health, Wellbeing & Work
- Investment
- Public Engagement
- Other

This credit includes substantive work by students and/or faculty (e.g. class projects, thesis projects, term papers, published papers) that involves active and experiential learning and contributes to positive sustainability outcomes on campus (see the Credit Example in the STARS Technical Manual). On-campus internships and non-credit work (e.g. that take place under supervision of sustainability staff or committees) may count as long as the work has a learning component.

This credit does not include immersive education programs, co-curricular activities, or community-based work, which are covered by *AC 5: Immersive Experience*, credits in the Campus Engagement subcategory, and credits in the Public Engagement subcategory, respectively.

This credit was marked as **Not Pursuing** so Reporting Fields will not be displayed.

Research

This subcategory seeks to recognize institutions that are conducting research on sustainability topics. Conducting research is a major function of many colleges and universities. By researching sustainability issues and refining theories and concepts, higher education institutions can continue to help the world understand sustainability challenges and develop new technologies, strategies, and approaches to address those challenges.

Credit
Academic Research
Support for Research
Access to Research

Academic Research

Responsible Party

Susan Coons
Program Coordinator
Office of Academic Initiatives

Criteria

Part 1

Institution's faculty and/or staff conduct sustainability research and the institution makes an inventory of its sustainability research publicly available.

Part 2

Institution's academic departments (or the equivalent) include faculty and staff who conduct sustainability research.

Any level of sustainability research is sufficient to be included for this credit. In other words, a researcher who conducts both sustainability research and other research may be included.

In order to report for this credit, the institution should conduct an inventory to identify its sustainability research activities and initiatives.

Each institution is free to choose a methodology to identify sustainability research that is most appropriate given its unique circumstances. For example, an institution may distribute a survey to all faculty members and ask them to self-identify as being engaged in sustainability research or ask the chairperson of each department to identify the sustainability research activities within his or her department. The research inventory should be based on the definition of "sustainability research" outlined in Standards and Terms and include, at minimum, all research centers, laboratories, departments, and faculty members whose research focuses on or is related to sustainability.

"---" *indicates that no data was submitted for this field*

Number of the institution's faculty and/or staff engaged in sustainability research:

226

Total number of the institution's faculty and/or staff engaged in research:

1,209

Number of academic departments (or the equivalent) that include at least one faculty or staff member that conducts sustainability research:

35

The total number of academic departments (or the equivalent) that conduct research:

77

A copy of the sustainability research inventory that includes the names and department affiliations of faculty and staff engaged in sustainability research:

2015UCISustainabilityResearchInventory.pdf

Names and department affiliations of faculty and staff engaged in sustainability research:

Please see pages 21-27 of the 2015 UCI Sustainability Research Inventory (uploaded above) for department affiliations of researchers. Additional information regarding listed faculty is provided beginning on page 28.

A brief description of the methodology the institution followed to complete the research inventory:

The 2015 UC Irvine Sustainability Research Inventory is based on the definition of sustainability research outlined in STARS 2.0.1 and includes, at minimum, all research centers, laboratories, departments, and faculty members whose research focuses on or is related to sustainability. The resulting inventory includes the names of all faculty engaged in sustainability research, along with their department affiliations, and a list of every department in which at least one faculty member engages in sustainability research.

The process outlined below was followed to specifically identify UC Irvine faculty engaged in sustainability research.
• To develop the initial inventory, an email was sent to all faculty in April 2012, asking them to self-identify; some faculty responded not only on their own behalf but also identified other faculty members who should be included on the list. A follow-up communication was sent to deans and department chairs, asking them to encourage faculty to respond.
• Various campus websites were consulted to learn the names of faculty affiliated with centers doing research in this area.
• Titles and department affiliations were validated with the Office of Academic Personnel, and URLs for faculty profiles were obtained using the campus's online directory and departmental websites.
• In 2013, 2014, and again in 2015, copies of the previous year's sustainability research inventory were distributed to all listed faculty for review and update with a request for updates, additions, and deletions. Faculty responses have been incorporated.
• In 2013, 2014, and again in 2015, new faculty (i.e., hired after the previous inventory) were identified and contacted, requesting them to self-identify if engaged in sustainability research.
• Prior to finalizing the 2015 Sustainability Research Inventory, the academic deans of all UCI Schools were contacted to verify the inventory of faculty engaged in sustainability research and ensure that all appropriate researchers were included.
o The deans were asked to review a list of all faculty from their school who were included in the 2014 sustainability, sorted by school and department, and identify any individuals who were no longer in their schools.
o The deans were also asked to review a list of new faculty, sorted by school and department, and identify new faculty in their schools who could be characterize as doing sustainability-related research. The list of new faculty was prepared from Office of Academic Personnel data and included all new faculty appointments since the 2014 inventory was prepared (i.e., since January 1, 2014).
o Faculty identified by the deans were contacted and asked to provide the information required to be included in the sustainability research inventory.

A brief description of notable accomplishments during the previous three years by faculty and/or staff engaged in sustainability research:

FIRST COMPREHENSIVE STUDY OF NATIVE VS. NON-NATIVE PLANT DISTRIBUTION IN THE U.S.
In the first comprehensive study to assess native vs. non-native plant distribution in the continental United States, UCI Professor Cascade

Sorte and colleagues at the University of Massachusetts and the University of Exeter found that non-native plant species are much more widespread than natives. The study involved a broad-scale assessment of more than 13,000 native and non-native plant distributions and used a modeling approach to identify the range of environments that these species currently inhabit and to anticipate future spread. Invasive species are one of the primary drivers of biodiversity loss worldwide, and recent research by Professor Sorte and colleagues indicates that their impacts are likely to increase under climate change. However, the scope of this threat is largely unknown. “Our predictions suggested that the non-native plants are already more widespread – and will eventually inhabit larger ranges – than species native to the United States,” said Professor Sorte. “Furthermore, non-natives currently inhabit only about 50 percent of their expected range, indicating that they still have plenty of space to invade.” The study was published in the January 2015 online issue of “Global Ecology and Biogeography.”
See:

http://www.bio.uci.edu/2015/01/non-native-plants-widespread-plenty-space-invade/

RESEARCH SHOWS GROWTH OF EMISSIONS FROM FOSSIL FUEL BURNING POWER PLANTS

Existing power plants around the world will pump out more than 300 billion tons of carbon dioxide over their expected lifetimes, significantly adding to atmospheric levels of the climate warming gas, according to UC Irvine and Princeton University scientists. Their findings, which appeared Aug. 26, 2014, in the journal “Environmental Research Letters,” are the first to quantify how quickly these “committed” emissions are growing – by about 4 percent per year – as more fossil fuel burning power plants are built.
Assuming these stations will operate for 40 years, the power plants constructed globally in 2012 alone will produce about 19 billion tons of CO during their existence, the researchers project. “Bringing down carbon emissions means retiring more fossil fuel-burning facilities than we build,” said Steven Davis, assistant professor of Earth system science at UCI and the study’s lead author. “But worldwide, we’ve built more coal-burning power plants in the past decade than in any previous decade, and closures of old plants aren’t keeping pace with this expansion.” Davis and co-author Robert Socolow of Princeton suggest the findings could be used by policymakers to evaluate the long-term climate impacts of current investments in infrastructure.
See:

http://news.uci.edu/press-releases/existing-power-plants-will-spew-300-billion-more-tons-of-car

bon-dioxide-during-use/

STUDY POINTS TO GROUNDWATER LOSS IN WEST

A study by UCI and NASA scientists found that more than 75 percent of the water loss in the drought-stricken Colorado River Basin since late 2004 came from underground resources. The extent of groundwater loss may pose a greater threat to the water supply of the western United States than previously thought. This study was the first to quantify the amount that groundwater contributes to the water needs of western states. The research team used data from NASA’s Gravity Recovery and Climate Experiment (GRACE) satellite mission to track changes in the mass of the Colorado River Basin, which are related to changes in water amount on and below the surface. Monthly measurements in the change in water mass from December 2004 to November 2013 revealed the basin lost nearly 53 million acre feet (65 cubic kilometers) of freshwater, almost double the volume of the nation’s largest reservoir, Nevada’s Lake Mead. More than three-quarters of the total – about 41 million acre feet (50 cubic kilometers) – was from groundwater. “We don’t know exactly how much groundwater we have left, so we don’t know when we’re going to run out,” said Stephanie Castle, a water resources specialist at UC Irvine and the study’s lead author. “This is a lot of water to lose. We thought that the picture could be pretty bad, but this was shocking.” Water above ground in the basin’s rivers and lakes is managed by the U.S. Bureau of Reclamation, and its losses are documented. Pumping from underground aquifers is regulated by individual states and is often not well documented. “There’s only one way to put together a very large-area study like this, and that is with satellites,” said senior author Jay Famiglietti, senior water cycle scientist at JPL on leave from UC Irvine, where he is an Earth system science professor. The study was accepted for publication in the journal

“Geophysical Research Letters,” which posted the manuscript online July 24, 2014. Coauthors included other scientists from NASA’s Goddard Space Flight Center, Greenbelt, Md.; and the National Center for Atmospheric Research, Boulder, Colo.
See:

http://news.uci.edu/press-releases/parched-west-is-using-up-underground-water-uci-nasa-find/

Note: On Sept. 16, 2014, the Los Angeles Times reported that “Gov. Jerry Brown signed a trio of bills … establishing a framework for statewide regulation of California's underground water sources, marking the first time in the state's history that groundwater will be managed on a large scale.”

STUDY SHOWS LITTLE BLACK CARBON REACHES OCEAN FLOOR
Just a fraction of the carbon that finds its way into Earth’s oceans – the black soot and charcoal residue of fires – stays there for thousands of years. A first-of-its-kind analysis by UC Irvine, Rice University and the University of South Carolina also revealed how some black carbon breaks away and hitches a ride to the ocean floor on passing particles. “Our previous work showed that the black carbon in ocean sediments is ancient,” said lead investigator Ellen Druffel, the Fred Kavli Chair in Earth System Science at UC Irvine. “It’s anywhere from 2,000 to 5,500 years older than the organic carbon in the same sediments. That means that it either stays dissolved in the water for a long time before it’s deposited or stays trapped somewhere else–like the soil–for thousands of years before it enters the ocean. This new study offers the most complete picture yet of how black carbon finds its way into deep ocean
sediments.” Scientific interest in black carbon is high, both because it’s a potential contributor to atmospheric climate change and because of its presence in natural “sinks” that store carbon out of harm’s way.
See:

http://news.uci.edu/briefs/study-finds-most-black-carbon-never-reaches-bottom-of-ocean/

The website URL where information about sustainability research is available:

http://initiatives.provost.uci.edu/wp-content/uploads/2015/02/2015UCISustainabilityResearchInventory.pdf

Support for Research

Responsible Party

Susan Coons
Program Coordinator
Office of Academic Initiatives

Criteria

Institution encourages and/or supports sustainability research through one or more of the following:

- An ongoing program to encourage students in multiple disciplines or academic programs to conduct research in sustainability. The program provides students with incentives to research sustainability. Such incentives may include, but are not limited to, fellowships, financial support, and mentorships. The program specifically aims to increase student sustainability research.
- An ongoing program to encourage faculty from multiple disciplines or academic programs to conduct research in sustainability topics. The program provides faculty with incentives to research sustainability. Such incentives may include, but are not limited to, fellowships, financial support, and faculty development workshops. The program specifically aims to increase faculty sustainability research.
- Formally adopted policies and procedures that give positive recognition to interdisciplinary, transdisciplinary, and multidisciplinary research during faculty promotion and/or tenure decisions.
- Ongoing library support for sustainability research and learning in the form of research guides, materials selection policies and practices, curriculum development efforts, sustainability literacy promotion, and e-learning objects focused on sustainability.

"---" *indicates that no data was submitted for this field*

Does the institution have a program to encourage student sustainability research that meets the criteria for this credit?:

Yes

A brief description of the institution's program(s) to encourage student research in sustainability:

CLIMATE ACTION FELLOW PROGRAM
UC Irvine is participating in the President's Sustainability Student Fellowship/Internship Program launched in February 2015 by the UC Office of the President. UC Irvine supplemented the fellowship fund by $4,000 through the Sustainability Initiative and the Undergraduate Research Opportunities Program (UROP) for a total of $11,500 in awards (inclusive of the $7,500 from UCOP): three Climate Action Fellowships of $2500 each to support climate action research and/or internships, and a $4000 fellowship for a Climate Communications and Engagement Fellow.

The Climate Action Fellowship Program seeks to fund undergraduate or graduate students whose proposed project will advance the goal of carbon neutrality. Successful fellowship applications will emphasize research, learning, and/or engagement about solutions to climate change. Projects may address a broad range of topics related to the goals of carbon neutrality and sustainability, including, but not limited to, environmental justice, climate justice, resilience, regeneration, adaptation, and mitigation. The 2015 Climate Action Fellows are:

Asiya Natekal, Doctoral student, Planning, Policy & Design
Title: "How Cool is UCI?!"
Areas: mitigation; urban heat island reduction

Kathleen Deck, Undergraduate, Earth System Science
Title: "Conservation Through Creation"
Areas: Climate Justice, Regeneration, Adaptation, Installation Art

Hope Pollard, Graduate student, Planning, Policy & Design/Ecology
Title: "UC REELS: UC Reserves for Energy Efficiency Learning"
Areas: Adaptation, Mitigation, Energy Efficiency

The Climate Communications Program seeks to position one student on each UC campus dedicated to supporting student engagement and communications efforts on campus for the UC Carbon Neutrality Initiative and the President's Global Climate Leadership Council (GCLC). At UC Irvine, the selected student is assigned as a fellow at the UC Irvine Global Sustainability Resource Center (GSRC). Under the supervision of GSRC staff, and in conjunction with the GCLC student representatives system-wide, the fellow 1) communicates with students about campus and UC-wide sustainability goals and programs, 2) assesses existing programs and efforts, and 3) engages undergraduate and graduate students in those efforts. Additional responsibilities include regular contributions to the GCLC Student Representative Blog, the GSRC student blog, and other student engagement communication platforms maintained by the GSRC and the GCLC student representatives. The 2015 Climate Communications Fellowship was split between two students:

Cody Lee, Undergraduate, Social Ecology

Amelia Rose Unsicker, Graduate Student, Dance

GLOBAL FOOD INITIATIVE
UC President Napolitano created a student fellowship program to fund three undergraduate or graduate projects on each UC campus to work on research projects or internships related to the UC Global Food Initiative. The Global Food Initiative was launched to align the UC's research, outreach and operations in a sustained effort to develop, demonstrate and export solutions for food security, health and sustainability. The UC Office of the President provided each campus with $7,500 to fund three $2,500 student projects. In response to a strong applicant pool at UC Irvine, the Undergraduate Research Opportunity Program (UROP) and the UCI Sustainability Initiative supplemented the fund by $5,000 in order to award five $2,500 UCI fellowships.

Five UC Irvine students were awarded $2,500 fellowships in 2014-2015 to fund research and related projects that focus on food issues. Funded projects include local-to-global contexts that address food insecurity and justice, environmental mapping for sustainable agriculture, and culture/food practices. The UC Irvine awardees are listed below. For additional details on these projects, see

http://www.sustainability.uci.edu/Engagement/UC-global-student-fellowships.html#one

Victoria Lowerson Bredow, graduate student in planning, policy & design, who will explore how to build a more sustainable and equitable food system in Orange County;

Sally Geislar, graduate student in planning, policy & design, who will lead a push to preserve and increase the synergy between the UCI community and the farmers market at University Center;

Crystal Hickerson, doctoral student in comparative literature, who will join with Geislar to institute a "grow your own food" program on campus;

Alexander Fung, a senior business major, who will team with fellow UCI undergraduates Jennifer Lima and Jessica Figueroa to establish a food pantry at the Student Outreach & Retention Center; and

Ankita Raturi, graduate student in informatics, who will work to develop a program modeling the environmental impact of agricultural systems.

SOLAR DECATHLON TEAM - STUDENT COMPETITION
In 2014, UC Irvine was selected to compete in the U.S. Department of Energy Solar Decathlon 2015, an international student competition that challenges university students to create solar-powered houses that are cost effective, energy efficient, and attractive. UC Irvine leads Team Orange County, a joint venture with Chapman University, Irvine Valley College and Saddleback College. Solar Decathletes compete in 10 different contests ranging from architecture and engineering to home appliance performance. The contest highlights a diverse range of design approaches and building technologies aimed at diverse markets, climates and regions, including urban, suburban and rural settings. Preparation and competition in the Solar Decathlon span portions of three academic years, ending with the October 2015 competition.

Team Orange County is building Casa del Sol, a solar-powered, zero-net-energy, multi-generational home that is well adapted to for Southern California. The house design promotes indoor-outdoor California lifestyle and incorporates passive solar (shading, ventilation, etc.) in addition to innovative technologies for energy management. Through the demonstration of innovative technology, the team strives to inspire more sustainable building practices in the local built environment.

The Solar Decathlon provides an opportunity for extensive student involvement in leveraging UC Irvine's research in new energy technologies, expanding its national leadership in sustainability and green technologies, and accessing partnerships with local professionals. Numerous opportunities exist for students and faculty to incorporate ongoing sustainability research in engineering, physical sciences, and social sciences in the design, construction, testing, and demonstration activities for Team Orange County's entry. Student decathletes also gain significant community outreach experience, showcasing the house's renewable energy systems and efficient technologies, products and appliances that save money and energy.
See

http://www.teamoc2015.com

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NEWKIRK CENTER FELLOWSHIPS
The UCI Newkirk Center for Science and Society promotes appropriate and effective uses of research in the natural and social sciences to enhance the quality of human life. The Center finds ways to harness the multidisciplinary capacities of UC Irvine to develop and share research knowledge with the public and policy makers so they can make informed decisions on vital policy issues on law, education, environment, health care, crime, and public infrastructure.

The Center sponsors Newkirk Center Fellowships for UCI graduate students to support research consistent with its mission. Awards up to $8,000 can be used for tuition, fees, and/or research support. Preference will be given for proposals that are in line with addressing scientific research issues that benefit society. Since 2004 Newkirk Fellows have been heavily focused in sustainability-related areas of research. The 2014-15 Newkirk Center Fellows are listed below. See

http://newkirkcenter.uci.edu/students/

Abraham Chiu, Department of Pharmacology, School of Medicine
More than fat-Understanding biochemical and vascular changes during exercise in obese children

Mariam Davtyan, Program in Public Health
Educating healthcare workers about HIV-stigma: A novel approach using PhotoVoice

Lynn Dombrowski, Department of Informatics, School of Information & Computer Sciences
How various perspectives on social justice affect the visioning and design of systems and technologies aimed to address issues of food justice

Julie Kim, Department of Sociology, School of Social Sciences
Elucidation of what marriage migration means in transnational brokered marriages across dimensions of gender, power, labor and emotions

Jennifer Long, School of Education
Ecohydrology citizen science: Can youth develop an understanding of systems by engaging in authentic research?

Bemmy Maharramov, Department of Planning, Policy & Design, School of Social Ecology
Innovative links between “on-the-ground’ environmental stewardship and local environmental policymaking

Colleen Nell, Department of Ecology & Evolutionary Biology, School of Biological Sciences
Avian predation as a means for regulation of damaging insects in a Coastal Sage Scrub ecosystem

Sana Sadiq, Department of Anthropology, School of Social Sciences
Female safety and public transportation in Indonesia

UCI PUBLIC IMPACT FELLOWSHIIPS
UC Irvine’s Graduate Division administers Public Impact Fellowships that support doctoral students whose research has the potential for substantial impact in the public sphere. Ideal candidates are engaged in research designed to significantly improve or enrich the lives of Californians and/or national and global communities. Selection criteria for Public Impact Fellowships include conducting research that has critical public impact, e.g., studies that aim to improve economic opportunity and well-being, health care, social justice, political participation, cultural engagement, and scientific or technical solutions to pressing social issues. In addition, students interested in the UCI/Stanley Behrens Public Impact Fellowship must be conducting cutting-edge research in one of the following areas: innovative medical therapies, social justice, global politics and religions, sustainability. The total number of $10,000 fellowships (full awards) and $1,000 fellowships (honorable mention awards) awarded annually varies; UCI/Stanley Behrens Fellowships provide two donor-funded awards matched by the Graduate Division for a total $20,000 award.

A number of current Public Impact Fellows are engaged in sustainability-related research. See

http://www.grad.uci.edu/funding/fellowships-awards/internal/public-impact.html

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The website URL where information about the student research program is available:

Does the institution have a program to encourage faculty sustainability research that meets the criteria for this credit?:

Yes

A brief description of the institution's program(s) to encourage faculty research in sustainability:

OFFICE OF ACADEMIC INITIATIVES (

http://www.initiatives.provost.uci.edu

)
In Fall 2013 a new campus initiative under the direction of the Vice Provost of Academic Initiatives was created to identify and support areas of interschool excellence. Sponsored by the Office of the Provost & Executive Vice Chancellor, the Office of Academic Initiatives provides up to $150,000 annually for three years to faculty teams in identified areas. Funding may be used for specialized research partnerships, workshops or conferences, collaboration with academic units on new graduate concentrations or emphases and undergraduate minors, coordination of grant applications, outreach and community engagement. The goal of these programs is to transcend traditional academic boundaries to work productively together on projects of national significance. Initiatives are chosen based on the possibility of achieving leadership in the proposed area, diversity of faculty participation, commitment of the leadership team, effectiveness of the plan, and likelihood of evolving into a more self-sustaining activity after three years.

Two of the five initiatives announced in 2014 are focused directly on sustainability: Water UCI and the UCI Sustainability Initiative.
• The UCI Sustainability Initiative (

http://www.sustainability.uci.edu

) provides a platform for interdisciplinary scholarship on the critical climate, environment, and resource issues confronting society. The Initiative aims to infuse sustainability across UC Irvine, empowering students and faculty with the rich institutional history of impactful research. The Sustainability Initiative promotes collaborations with diverse communities on and off campus in developing solutions to challenges affecting California and the globe. Community-engaged scholarship and practice are integral to UC Irvine's excellence as a research university and underlies how the university creates knowledge to serve society. Initiative goals directly related to promoting faculty research in sustainability include: facilitate connection and resource sharing on and off campus; incubate new projects by faculty, staff, and student leaders; and reinforce campus efforts to inspire, enable, and evaluate public impact through interschool research, education, and engagement.

Current research-related activities under the Sustainability Initiative include: the Salton Sea Initiative, the Flood-Resilient Infrastructure & Sustainable Environments (FloodRISE) project, convening Coastal and Marine Science faculty, and partnering with the School of Social Ecology to present the Toward a Sustainable 21st Century conferences series and the Empowering Sustainability program.

• Water UCI is a campus-wide initiative that serves as a coordinating vehicle to facilitate meaningful collaborations across schools, departments, and existing research centers around questions of fundamental and applied water science, technology, management, and policy. Focusing in the fields of fundamental and applied water science, technology, engineering, management and policy, Water UCI addresses "grand challenges" – high-consequence, high-uncertainty problems that entail unprecedented mitigation costs, have the potential to generate social conflict, and may be approaching irreversibility. While faculty research interests embrace global as well as national aspects of these issues, Water UCI takes as a point of departure the unique expertise afforded at UC Irvine in those areas of water research that have a distinctively California focus, and for which UC Irvine has unique strengths, comparative advantages, strong experience, and great proficiency. These issues include urban and agricultural water management, competition for increasingly scarce and over-taxed water supplies by diverse users, the food-water-energy nexus, and others. Water UCI represents a means of enhancing faculty research in those segments of the campus that are already engaged in the investigation of water issues, and promoting further collaborations with researchers in air, energy, climate change, biodiversity, and other environmentally related areas.

UCI ENVIRONMENT INSTITUTE
From 2008 to 2013 the UC Irvine Environment Institute sponsored inter-disciplinary research projects to promote campus research and

education in the areas of global change, energy, and sustainable resources. The Environment Institute program funded short-term projects (up to one year) that involve two or more principal investigators across disciplines, and ideally across schools or departments; form new collaborations; and build upon the internationally recognized environmental and sustainability-related research.
See

http://environment.uci.edu/research/ei/seed

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The website URL where information about the faculty research program is available:

Has the institution formally adopted policies and procedures that give positive recognition to interdisciplinary, transdisciplinary, and multidisciplinary research during faculty promotion and/or tenure decisions?:

Yes

A brief description or the text of the institution's policy regarding interdisciplinary research:

The strategic plan for UC Irvine, 2005-15, includes the following as one of 10 principal objectives for the campus: "Develop innovative programs in emerging disciplines, support interdisciplinary collaboration and establish new research centers by reserving some of the growth resources for these initiatives" (p. 10). Over the past 10 years, UC Irvine has reserved a portion of new faculty lines for allocation directly to programs and centers focused on interdisciplinary research. For example, the UC Irvine Environment Institute (2008-2013) received several new lines to recruit for appointments in select departments with an interest in interdisciplinary sustainability research. Faculty recruitment focused on key anthropogenic systems and forces driving global change today, allowing UC Irvine to build on strengths in environmental research and develop campus-wide collaborations that relate global change, energy, and sustainable resources to societal needs. Recruited faculty teach and conduct research in their primary departments within the School of Biological Sciences, School of Physical Sciences, or The Henry Samueli School of Engineering and work to strengthen environmental research across UCI.

Established in 2014, the Office of Academic Initiatives promotes even greater coordination of promising new multidisciplinary research and educational programs at UC Irvine that more effectively address complex social challenges, make distinctive contributions to important and/or emergent fields of inquiry, and develop innovative academic programs. The academic initiative program is designed to provide up to three years of support to teams of engaged faculty from across multiple schools who are committed to developing new areas of interschool excellence through research collaborations, academic programs, and outreach and community engagement. The intent of the program is to support initiatives with a wider range of activities than can be accommodated by ORUs or campus and school research centers. UC Irvine established five interdisciplinary initiatives in 2014 (Data Science, Exercise Medicine and Sports Science, Medical Humanities, Sustainability Initiative, and Water UCI). The office is currently evaluating proposals for additional initiatives to be announced in 2015. See

http://initiatives.provost.uci.edu/

In addition, UC Irvine has instituted various personnel and budgetary policies to support interdisciplinary research, including (1) formal joint appointments of faculty in two or more disciplinary units with participation of both units in personnel reviews and promotions; (2) enrollment policies that share credit among different departments for students enrolled in courses that cross departmental and school lines; (3) creation of interdisciplinary graduate degree programs that report centrally to Graduate Division rather than to one department

or school; (4) accounting changes that allow faculty to credit extramural funding partially or wholly to interdisciplinary research centers rather than to a single home department.

These policy changes have been implemented in conjunction with the more general commitment to innovative interdisciplinary organizations that have characterized UC Irvine since its founding in 1965. For example, Organized Research Units (ORUs) are academic units established by UC Irvine to provide a supportive infrastructure for interdisciplinary research complementary to the academic goals of departments of instruction and research. In accordance with “UC Administrative Policies and Procedures Concerning Organized Research Units,” ORUs are established on single campuses, whereas Multi-campus Research Units (MRUs) exist on two or more campuses. An ORU must be complementary to the academic goals of the University. The functions of an ORU are to facilitate research and research collaborations; disseminate research results through research conferences, meetings and other activities; strengthen graduate and undergraduate education by providing students with training opportunities and access to facilities; seek extramural research funds; and carry out university and public service programs related to the ORU's research expertise. See

http://www.research.uci.edu/centers-institutes/oru-guidelines.html

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The website URL where information about the treatment of interdisciplinary research is available:

Does the institution provide ongoing library support for sustainability research and learning that meets the criteria for this credit?:

Yes

A brief description of the institution's library support for sustainability research and learning:

The UC Irvine Libraries provide ongoing support for interdisciplinary sustainability research through research guides, collection development policies and practices, designated Research Librarians (Earth Systems Science, Biological Sciences, Applied Sciences, etc.), and in-depth reference consultation and assistance for researchers and students.

Research guides are available for a number of subjects, including several sustainability-related topics. Two sustainability-related research guides are:

http://libguides.lib.uci.edu/env_sci

and

http://libguides.lib.uci.edu/biology

. The complete list of all the guides is at:

http://libguides.lib.uci.edu/browse.php

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Research librarians work with faculty and staff to prepare collection development policies for specific research areas. The Earth Systems Science Collection Development Policy is an example of a UC Irvine sustainability-focused collection development guide that supports cross-disciplinary teaching and research at UCI as well as several Research Centers. The collection emphasizes student (undergraduate through doctoral) research as well as research at the faculty and postdoctoral levels. Selection of materials concentrates on the broad interest areas of earth and environmental science with emphasis on environmental policy and planning, air quality monitoring and assessment, scientific research, laboratory analysis, science education, natural resource management, wildlife management, conservation and environmental protection, and water resource management.

The primary URL for the UCI Libraries is

http://www.lib.uci.edu/

. Researchers can access library collections via two online catalogs: UCI's library collections

http://antpac.lib.uci.edu/

; and UCI, UC, and libraries worldwide

http://uci.worldcat.org/

. UCI library collections can also be accessed via

http://www.lib.uci.edu/collections/library-collections.html

. Reference assistance is available in multiple ways (in-person; 24/7 webrefchat; email; appointments for research consultations):

http://www.lib.uci.edu/services/ask/ask-a-librarian.html

. Online library instruction request forms are available

http://www.lib.uci.edu/services/workshops/instruction-request-form.html

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The website URL where information about the institution's library support for sustainability is available:

http://www.lib.uci.edu/

Access to Research

Criteria

Institution has a formally adopted open access policy that ensures that versions of all future scholarly articles by faculty and staff and all future theses and dissertations are deposited in a designated open access repository.

The open access repository may be managed by the institution or the institution may participate in a consortium with a consortial and/or outsourced open access repository.

This credit was marked as **Not Pursuing** so Reporting Fields will not be displayed.

Engagement

Campus Engagement

This subcategory seeks to recognize institutions that provide their students with sustainability learning experiences outside the formal curriculum. Engaging in sustainability issues through co-curricular activities allows students to deepen and apply their understandings of sustainability principles. Institution-sponsored co-curricular sustainability offerings, often coordinated by student affairs offices, help integrate sustainability into the campus culture and set a positive tone for the institution.

In addition, this subcategory recognizes institutions that support faculty and staff engagement, training, and development programs in sustainability. Faculty and staff members' daily decisions impact an institution's sustainability performance. Equipping faculty and staff with the tools, knowledge, and motivation to adopt behavior changes that promote sustainability is an essential activity of a sustainable campus.

Credit
Student Educators Program
Student Orientation
Student Life
Outreach Materials and Publications
Outreach Campaign
Employee Educators Program
Employee Orientation
Staff Professional Development

Student Educators Program

Responsible Party

Abby Reyes
Director of Academic Sustainability Initiatives
Academic Affairs

Criteria

Institution coordinates an ongoing peer-to-peer sustainability outreach and education program for degree-seeking students. The institution:

- Selects or appoints students to serve as educators and formally designates the students as educators (paid and/or volunteer),
- Provides formal training to the educators in how to conduct outreach, and
- Offers faculty or staff and/or other financial support to the program.

This credit focuses on programs for degree-seeking students enrolled in a for-credit program. Continuing education and/or non-credit students are excluded from this credit.

This credit recognizes ongoing student educator programs that engage students on a regular basis. For example, student educators may be responsible for serving (i.e. directly targeting) a particular subset of students, such as those living in residence halls or enrolled in certain academic subdivisions. Thus, a group of students may be served by a program even if not all of these students avail themselves of the outreach and education offerings.

Sustainability outreach campaigns, sustainability events, and student clubs or groups are not eligible for this credit unless the criteria outlined above are met. These programs are covered by *EN 5: Outreach Campaign* and *EN 3: Student Life*.

Submission Note:

Additional URLs:

http://sites.uci.edu/costaricaprogram/

http://sites.uci.edu/empoweringsustainability/

"---" *indicates that no data was submitted for this field*

Does the institution coordinate one or more ongoing student, peer-to-peer sustainability outreach and education programs that meet the criteria for this credit?:

Yes

Number of degree-seeking students enrolled at the institution:

29,358

Name of the student educators program (1st program):

Summer Institute for Sustainability Leadership

Number of students served (i.e. directly targeted) by the program (1st program):

5,394

A brief description of the program, including examples of peer-to-peer outreach activities (1st program):

The Summer Institute for Sustainability Leadership (SISL) is a three-day residential immersion program for incoming first-year and transfer students. SISL empowers undergraduate students with the skills, tools, and relationships to become the next generation of sustainability leaders. The Institute includes workshops on sustainability, leadership and action-oriented projects that engage students in team building activities, community service, projects and peer to peer learning. During SISL, incoming students are taught by returning student mentors, each of whom plays a substantial student leadership role on campus.

The goal of SISL is to catalyze a culture of sustainability by training the next generation of sustainability leaders as they enter UC Irvine, the first campus in the University of California system to offer this kind of sustainability leadership immersion program for incoming college students. The Global Sustainability Resource Center (GSRC) offers the program.

The successful inaugural session took place in 2013, and the program was repeated in 2014. Out of the 5,394 incoming students targeted, 110 applicants vied for the 26 available spots. Students gave positive feedback on leadership skills training and connecting with mentors, and they valued the peer-to-peer outreach activities in the program, which fostered community building on campus.

During Winter 2015, GSRC brought together SISL graduates with students in the Global Sustainability Minor for a workshop at the the Ecology Center, an educational center in Orange County. At the Ecology Center, students learned hands-on sustainability skills in food, water, waste, energy and shelter, including a composting workshop.

A brief description of how the student educators are selected (1st program):

Student Affairs sends an invitation email to all incoming students, and the program is included on online materials geared to orientation. Applicants then complete an online application, including essay questions. Staff and student leaders from the Global Sustainability Resource Center (GSRC) select the SISL participants and peer mentors.

A brief description of the formal training that the student educators receive (1st program):

SISL provides students with the skills, tools, and relationships to become the next generation of sustainability leaders. The Institute includes workshops on sustainability, leadership and action-oriented projects that engage students in team-building activities, and community service. Students receive training in strategic questioning, community visioning, and action planning.

A brief description of the financial or other support the institution provides to the program (1st program):

UCI Student Affairs, Academic Affairs, and The Green Initiative Fund -- a student-managed, fee-based fund that provides undergraduate students with the resources to pursue sustainability projects on campus -- provide the financial support for SISL. Each SISL participant is asked to contribute $25 toward her/his participation.

Name of the student educators program (2nd program):

GSRC Internship Program

Number of students served (i.e. directly targeted) by the program (2nd program):

20

A brief description of the program, including examples of peer-to-peer outreach activities (2nd program):

The Global Sustainability Resource Center (GSRC) has an internship program that gives students the opportunity to work with staff within the GSRC and the UCI Sustainability Initiative to accomplish key projects in the following areas: 1) Campus as a Living Lab, 2) Communiversity, and 3) Organizing. Students engage in peer-to-peer outreach through campus events, online newsletters and social media communication such as Facebook and the Anteaters Go Green Blog. The GSRC determines the activities and projects based on the intersection of intern interest and what is needed to support the GSRC. More experienced student assistants, interns, and fellows also educate peer-to-peer the incoming interns on substantive sustainability issues, action planning, an office management.

A brief description of how the student educators are selected (2nd program):

Through an affirmative outreach program, the GSRC communicates internship opportunities to students. Students go through an application process and a formal interview. Students are selected based on the GSRC's needs, their interest level and existing opportunities. GSRC attempts to place as many qualified students in internships as possible given current levels of staffing and student mentor availability.

A brief description of the formal training that the student educators receive (2nd program):

Students who engage in the GSRC internship program gain skills in:

1) Community building
2) Event planning
3) Organizing skills
4) Education and outreach
5) Communication and information technology
6) Strategic questioning (a technique for values clarification, visioning, action planning)
7) Reflective learning to develop a critical lens on local to global solidarity and deepening understanding of the interdependence of all life

A brief description of the financial or other support the institution provides to the program (2nd program):

The GSRC internship program receives financial support from the UCI Sustainability Initiative and the University of California Office of the President through the Climate Neutrality Initiative. Additional intern support is provided by the UCI School of Social Ecology's Field Study Placement Program.

Name of the student educators program (3rd program):

EARTH Reps

Number of students served (i.e. directly targeted) by the program (3rd program):

8,250

A brief description of the program, including examples of peer-to-peer outreach activities (3rd program):

EARTH Reps is a sustainability leadership program for freshmen living in on-campus residence halls. Being an EARTH Rep allows the student to become a liaison between GSRC and peers in their residence hall. This student-led program aims to train emerging sustainability leaders; expand campus awareness of the framework of sustainability; and build community among students, staff, and faculty. There are two levels of peer-to-peer education in this program. The first involves student sustainability organization leaders, campus operations staff and Global Sustainability Resource Center student staff to educate EARTH Reps on a different sustainability topic each month. The same resource people then assist EARTH Reps to plan and execute a monthly outreach project in their residence halls on the various topics. The monthly project represents the second level of peer-to-peer education; through the projects, EARTH Reps become the educators of their residence hall peers.

The program targets all freshmen, with the goal of having one EARTH Rep for each of the 53 residence halls. During the 2012-2013 academic year, 200 freshmen were reached. During Spring 2014, 29 EARTH Reps representing 21 residence halls reached 1,866 first-year students.

A brief description of how the student educators are selected (3rd program):

The first level of student educators (campus staff, Global Sustainability Resource Center student staff, and student sustainability organization leaders) founded this program in 2012. The second level of student educators (EARTH Reps) completed applications and were selected by the Global Sustainability Resource Center student staff.

A brief description of the formal training that the student educators receive (3rd program):

First-level student educators participated in leadership and facilitation training through the Global Sustainability Resource Center. The first-level students and campus resource staff specialists provide formal training to the EARTH Reps and act as advisors and mentors for the program.

A brief description of the financial or other support the institution provides to the program (3rd program):

The Global Sustainability Resource Center student staff are paid by the UCI Sustainability Initiative. The Sustainability Initiative also provides staffing support from Abigail Reyes, director of the Sustainability Initiative, and, through a partnership with Student Affairs, two GSRC co-program managers.

Name(s) of the student educator program(s) (all other programs):

1) Trash Talkers, 2) Costa Rica Program, and 3) Empowering Sustainability

Number of students served (i.e. directly targeted) by all other student educator programs:

8,650

A brief description of the program(s), including examples of peer-to-peer outreach activities (all other programs):

1) UC Irvine's Solid Waste and Recycling Program trains "Trash Talkers," students who are present at major UCI events that aim for zero waste. The students stand next to the waste bins and teach event-goers where to direct their trash, in containers marked for recycling, composting, and landfill.

2) The UC Irvine Costa Rica Program, sponsored by Student Housing and Student Affairs, in partnership with the Division of Undergraduate Education, includes both an academic component and a cultural immersion trip to Costa Rica. This program allows 17 UCI Students to experience a global sustainability and cultural immersion program leading to an increased cultural competence and global leadership development. Upon returning to the United States, each program participant commits to doing sustainability outreach to at least 500 additional people as a requirement of participation in the program. See:

http://sites.uci.edu/costaricaprogram/

3) Empowering Sustainability is a fellowship program for an international cohort of emerging sustainability leaders. The fellowship centers around an annual summer conference convened at UCI. The central purpose is to reach out to the next generation of leaders to create a more sustainable 21st Century by facilitating the cross-generational sharing of mutual experiences and promoting intense collaborative networking among the emerging leaders. Through capacity building, project implementation, knowledge sharing and collaborative management, fellows from more than 25 countries (including UC students) are contributing to the Empowering Sustainability vision. They are establishing knowledge-sharing networks within their own countries and across boundaries through the use of social media, peer exchanges and an electronic journal. In addition, the global network that Empowering Sustainability facilitates can link Orange County philanthropists and local businesses eager to support local initiatives on the ground. Fellows include an expanding network of activists, academics, and practitioners from Brazil, China, Costa Rica, Ecuador, Egypt, England, India, Israel, Italy, Kyrgyzstan, Mexico, Netherlands, Russia, South Korea, Spain, Thailand, United States, Venezuela, Barbados, Chile, Azerbaijan, Cambodia, Myanmar/Burma, Nigeria, and Haiti. The program has been running annually since 2011 and includes UCI undergraduate and graduate students in the conference. The 2014 conference included leaders from the indigenous communities from Washington State and Hawaii. See:

http://sites.uci.edu/empoweringsustainability/

A brief description of how the student educators are selected (all other programs):

1) Trash Talkers are selected by the Solid Waste and Recycling program coordinator in response to calls for volunteers.

2) Costa Rica Program participants are selected after a competitive application process by the Costa Rica Program under Student Affairs.

3) Empowering Sustainability organizers reach out internationally and across the campus to individuals engaged in sustainability, seeking nominations and self-nominations. The program is potentially open to all undergraduates and graduate students at UC Irvine. Program organizers choose the participants, based on space availability. The program supports 40-50 fellows and another 60 observers, depending on the space availability.

A brief description of the formal training that the student educators receive (all other programs):

1) The Solid Waste and Recycling program trains Trash Talkers prior to zero waste events.

2) The Costa Rica Program trains participants in sustainability and other relevant topics during an academic, for credit course before and after the immersion trip.

3) In addition to offering formal seminars on sustainability-focused topics, fellows offer peer-to-peer teaching on approaches to sustainability projects that are ongoing or emerging. These exchanges happen in person during the annual conference and virtually through an online journal.

A brief description of the financial or other support the institution provides to the program (all other programs):

1) Trash talkers are volunteer students or interns receiving academic credit with the Solid Waste and Recycling program.

2) Costa Rica Program participants receive both academic credit and modest financial support toward the immersion trip from the program sponsors.

3) Professor John Whiteley in the UCI School of Social Ecology convenes Empowering Sustainability in coordination with faculty and staff from additional environment- and sustainability-focused school-based research centers. The program is co-sponsored by The School of Law Center for Land, Environment, and Natural Resources (CLEANR), and School of Social Ecology staff actively support this event. The program also receives support from a donor. UCI Ph.D. candidate Juliana Zanotto is student coordinator of the program.

Total number of hours student educators are engaged in peer-to-peer sustainability outreach and education activities annually:

7,200

The website URL for the peer-to-peer student outreach and education program(s):

http://sustainability.uci.edu/studentinvolvement/gsrc/

Student Orientation

Responsible Party

Abby Reyes
Director of Academic Sustainability Initiatives
Academic Affairs

Criteria

Institution includes sustainability prominently in its student orientation activities and programming. Sustainability activities and programming are intended to educate about the principles and practices of sustainability. The topics covered include multiple dimensions of sustainability (i.e. social, environmental and economic).

Because orientation activities vary from one institution to another, prominent inclusion of sustainability may not take the same form on each campus. Prominent inclusion of sustainability may also take different forms for different types of students (e.g. undergraduate students, transfer students, graduate students). When reporting for this credit, each institution will determine what prominent inclusion of sustainability means given its particular context. (See the Credit Example in the STARS Technical Manual.)

As this credit is intended to recognize programming and student learning about sustainability, incorporating sustainability strategies into event planning (e.g. making recycling bins accessible or not serving bottled water) is not, in and of itself, sufficient for this credit. Such strategies may count if they are highlighted and are part of the educational offerings. For example, serving local food would not, in and of itself, be sufficient for this credit; however, serving local food and providing information about sustainable food systems during meals could contribute to earning this credit.

Submission Note:

The percentage of incoming students afforded the opportunity to participate in orientation activities that prominently feature sustainability refers to incoming freshmen.

"---" *indicates that no data was submitted for this field*

The percentage of entering students that are provided an opportunity to participate in orientation activities and programming that prominently include sustainability:

100

A brief description of how sustainability is included prominently in new student orientation:

The Student Housing Sustainability Session for paraprofessional staff was offered in 2014. The 2.5 hour session was held to educate, connect and excite our student leaders about sustainability. The session included the following: "The Story of Stuff," Eco Footprint, zero waste in Housing & Dining, ways to get involved, and student commitments to make change. The session ended with an open table discussion hosted by the leaders in sustainability from the following organizations, departments and programs: Global Sustainability Resource Center, Housing, Facilities, Dining, and the Costa Rica program.

The student orientation added a request for the students to “go green” and bring their own linen. This request was made to increase the program’s sustainability. As a result, the campus did not have to purchase new linen for this event. In addition, this year The Green Initiative Fund (TGIF) provided reusable grocery bags for the students to build awareness of zero waste. Volunteers received reusable water bottles, thus minimizing the use of single use plastic bottles and cups.

The Anteaters Go Green Sustainability Orientation aims to create a culture of sustainability on the UCI campus through first-year student education and engagement. Offered through UC Irvine's Global Sustainability Resource Center (GSRC), the orientation provides first-year students with information about sustainability academics, co-curricular opportunities and resources, the basics of reducing one’s carbon and water footprint while living at UCI, and the environmental, social justice, and economic equity aspects of sustainability. The orientation is based on UCI's Anteaters Go Green: A guide to sustainability classes, resources, and living at UCI. This guide was created for students by students. Student volunteers deliver the live, in person orientation presentations in residence halls during weeks 1-4 of Fall Quarter. The orientation further strengthens the growing sustainability movement fostered by UCI students, faculty, and staff who are building bridges between academic and student life on campus.

See the "Anteaters Go Green Guide" at:

http://www.sustainability.uci.edu/StudentInvolvement/anteatergogreenguide.pdf

Incoming students who are shopping for meal plans find information about sustainable and “Fresh & Healthy” dining options on the website for UCI Hospitality and Dining. Menu information includes information on kosher, vegan, vegetarian, and gluten-free food choices. See:

http://uci.campusdish.com/

The website URL where information about sustainability in student orientation is available:

Student Life

Responsible Party

Abby Reyes
Director of Academic Sustainability Initiatives
Academic Affairs

Criteria

Institution has co-curricular sustainability programs and initiatives. The programs and initiatives fall into one or more of the following categories:

- Active student groups focused on sustainability
- Gardens, farms, community supported agriculture (CSA) or fishery programs, and urban agriculture projects where students are able to gain experience in organic agriculture and sustainable food systems
- Sustainable enterprises that include sustainability as part of their mission statements or stated purposes (e.g. cafés through which students gain sustainable business skills)
- Sustainable investment funds, green revolving funds or sustainable microfinance initiatives through which students can develop socially, environmentally and fiscally responsible investment and financial skills
- Conferences, speaker series, symposia or similar events related to sustainability that have students as the intended audience
- Cultural arts events, installations or performances related to sustainability that have students as the intended audience
- Wilderness or outdoors programs (e.g. that organize hiking, backpacking, kayaking, or other outings for students and follow Leave No Trace principles
- Sustainability-related themes chosen for themed semesters, years, or first-year experiences (e.g. choosing a sustainability-related book for common reading)
- Programs through which students can learn sustainable life skills (e.g. a series of sustainable living workshops, a model room in a residence hall that is open to students during regular visitation hours and demonstrates sustainable living principles, or sustainability-themed housing where residents and visitors learn about sustainability together)
- Sustainability-focused student employment opportunities offered by the institution
- Graduation pledges through which students pledge to consider social and environmental responsibility in future job and other decisions
- Other co-curricular sustainability programs and initiatives

Multiple programs and initiatives may be reported for each category and each category may include institution-governed and/or student-governed programs.

"---" *indicates that no data was submitted for this field*

Does the institution have one or more co-curricular sustainability programs and initiatives that fall into the following categories?:

	Yes or No

Active student groups focused on sustainability	Yes
Gardens, farms, community supported agriculture (CSA) or fishery programs, or urban agriculture projects where students are able to gain experience in organic agriculture and sustainable food systems	Yes
Student-run enterprises that include sustainability as part of their mission statements or stated purposes	Yes
Sustainable investment funds, green revolving funds or sustainable microfinance initiatives through which students can develop socially, environmentally and fiscally responsible investment and financial skills	Yes
Conferences, speaker series, symposia or similar events related to sustainability that have students as the intended audience	Yes
Cultural arts events, installations or performances related to sustainability that have students as the intended audience	Yes
Wilderness or outdoors programs that follow Leave No Trace principles	Yes
Sustainability-related themes chosen for themed semesters, years, or first-year experiences	No
Programs through which students can learn sustainable life skills	Yes
Sustainability-focused student employment opportunities offered by the institution	Yes
Graduation pledges through which students pledge to consider social and environmental responsibility in future job and other decisions	No
Other co-curricular sustainability programs and initiatives	Yes

The name and a brief description of each student group focused on sustainability:

The Earth System Science Club is an undergraduate student run organization committed to bringing together individuals interested in the field of Earth System Science as a community. The club aims to prepare students to contribute to a fundamental scientific understanding of the Earth as a system through co-curricular training of the next generation of scientists, including training about informing and educating policymakers and the public-at-large. The club provides Earth System Science related volunteer and networking opportunities.

http://ess-club.wix.com/essc

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CALPIRG Students is an independent statewide student organization that works on issues such as environmental protection, consumer protection, hunger and homelessness. For over 40 years students with their campus PIRG chapters have been making a real difference in people's lives and winning concrete changes to build a better world. CALPIRG gives students the skills and opportunity to practice effective citizenship. Both here on campus and out in the world, they mobilize students to investigate big social problems, come up with practical solutions, convince the media and public to pay attention, and get decision-makers to act.

http://calpirgstudents.org/uci

The Sustainable Cities Club is a group for students interested in learning about the variety of ideas that go into making cities more sustainable. The club focuses on learning about sustainable design options and promoting sustainability as a paradigm of thought, bringing in expert guest speakers, working on sustainability projects on campus, and navigating career and graduate school options. The focus covers the built environment: green building, sustainable architecture, energy efficiency, renewable energy, sustainable materials, water management, transportation issues, walkable cities, safe cities, socially vibrant cities, ecological vitality, biodiversity, local food production, etc. The club organizes weekly discussions, guest speakers, and projects to learn more about green building.

http://www.sustainability.uci.edu/StudentInvolvement/StudentOrganizations.html

Climatepedia. UC Irvine students have formed a new chapter of Climatepedia, a student organization dedicated to bridging the gap between the general public and the academic community regarding climate science. It is non partisan and serves to inform people of basic facts about climate change. It also entails sustainability and public outreach components, as well as volunteering research/course credit and social events for students involved.

http://www.climatepedia.org/about.html

CLEAN is founded on the belief that education is the essential foundation for global climate change solutions. Through a program designed by active climate science researchers to supplement existing science education, UC Irvine students participating in CLEAN seek to provide children and youth with the fundamental scientific background, tools and support they need to take positive action.

http://www.ess.uci.edu/researchgrp/clean/home

Engineers Without Borders - USA (EWB-USA) is a volunteer-based non-profit organization committed to partnering with developing communities to help meet their basics needs. Engineers Without Borders at UC Irvine is a unique multidisciplinary chapter committed to empowering these communities through leadership, sustainable engineering, public health and other disciplines.

http://www.ewb-uci.org/

Global Brigades is the world's largest student-led global health and sustainable development organization. Environmental Brigade volunteers work with rural families and community leaders to improve environmental sustainability and livelihood in biodiverse, but at risk regions. The main three projects that volunteers implement are reforestation, agricultural sustainability, and management of organic and inorganic wastes. A one-week Environmental Brigade to Panama in the summer provides UC Irvine student volunteers an opportunity to work alongside community members to promote and implement environmentally sustainable development solutions. Volunteers work in a variety of landscapes, ranging from virgin rainforests to urban beaches, each presenting different challenges for the survival of native species and future generations.

https://sites.google.com/site/gebucirvine/Irvine

Irvine Students Against Animal Cruelty (ISAAC) is a club dedicated to raising awareness about and actively trying to change the plight of non-human animals in our society. Through campus and community outreach,promoting veg*ism, volunteering and activism, the group aims to inform people about the various ways animals are used in our society and the cruelties involved in consuming animal products. The group similarly aims to produce humane alternatives to animal products, inform people about how raising animals for food affects the environment, and to stress the health benefits associated with veg*ism.

http://sustainability.uci.edu/studentinvolvement/studentorganizations/

The Net Impact Chapter at the UC Irvine Paul Merage School of Business is committed to grow and strengthen a network of leaders who use the power of business to make a positive net social, environmental and economic impact in the Merage and Orange County communities. The enterprises connected through Net Impact are not only non-profit organizations but also companies who make a profit and still keeping their social and environmental responsibilities on top priority.

http://merage.uci.edu/MSA/ClubProfile.aspx?ProfileID=13

As a student club, Transit Advocates is committed to making transportation more accessible for those at UCI who need it. Transit Advocates was awarded $12,000 for an outreach program to educate incoming and present freshmen about using OCTA, I-Shuttle, and other mass transit in Orange County.

http://ppd.soceco.uci.edu/events/transit-advocates-uc-irvine

OCSCB is a local chapter of the Society for Conservation Biology (SCB), "an international professional organization dedicated to promoting the scientific study of the phenomena that affect the maintenance, loss, and restoration of biological diversity." As a chapter of the larger organization, members share the vision and values of SCB, and focus on how to apply them locally by increasing the involvement of Orange County citizens in local conservation-based science through guest lectures, outdoor activities, and research opportunities.

http://www.ocscb.org/whoweare.shtml

The Real Food Challenge is a national student movement advocating for a more sustainable food system. We want to see more "real" food in our college eateries -- food that is ecologically sound, community-based, humane, and fair. The purpose of this organization is to create and implement clear guidelines that prioritize community based, ecologically sound, fair, and humane food purchasing; waste reduction; and green dining facility standards at UC Irvine. In turn, this supports the health of consumers, laborers, local economies, and the environment.

http://ucirealfoodchallenge.weebly.com/

Theta Psi is a co-ed professional sustainability fraternity dedicated to empowering innovative leaders, who are passionate about alleviating the current sustainability crises through an economically reasonable, socially just, and environmentally responsible approach.

http://thetapsi.wordpress.com/

The Alliance to Save Energy's PowerSave Green Campus Program is a student-driven energy efficiency workforce education and training program that generates actual energy savings and trains the next generation of energy efficiency professionals.Two-unit for-credit internships are available.

http://powersavecampusuci.weebly.com/

SACSE - The Student Advisory Council on Sustainability Education (SASCE) provides student input to the faculty Task Force on Sustainability Education (TFSE). AY 2014-15 is the third SACSE cohort. The purpose of SASCE is to advise TFSE on sustainability education and build a unified vision of sustainability education on campus. The 2015 cohort includes 12 students (10 undergraduates, 1 graduate student and 1 Ph.D. candidate) from a variety of academic disciplines including engineering, social ecology, environmental science and public policy.

See:

https://ucigsrc.wordpress.com/2015/01/09/opportunity-for-sustainability-and-climate-student-lea

ders-apply-to-serve-on-ucis-student-advisory-council-on-sustainability-education-sacse/

Climate Communication & Engagement Fellows - The UC Office of the President sought to position one student on each UC campus dedicated to supporting student engagement and communications efforts for the UC Carbon Neutrality Initiative and the President's Global Climate Leadership Council (GCLC). With supplemental support from the UCI Sustainability Initiative, two fellows were selected to serve as the student engagement and communications representatives for the campus. These two students will be housed in the Global Sustainability Resource Center (GSRC). Under the supervision of GSRC staff, and in conjunction with the GCLC system-wide student representatives, the fellows will (1) communicate with students about campus and UC-wide sustainability goals and programs, (2) assess existing programs and efforts, and (3) engage undergraduate and graduate students in those efforts.

In addition, engagement and communication efforts will enable and empower students to provide feedback about campus and UC-wide sustainability programs to campus staff. The fellows is also expected to participate in a UC system-wide discussion and communication process. This process will be facilitated and overseen by the student representatives to the GCLC. The Climate Communications and Engagement Fellows are required to contribute regularly to the GCLC Student Representative Blog, the GSRC student blog, and other student engagement communication platforms maintained by the GSRC and the GCLC student representatives.

http://www.sustainability.uci.edu/Engagement/uc-carbon-neutrality-climate-communications-engage

ment-fellow.html

The website URL where information about student groups is available:

http://www.sustainability.uci.edu/StudentInvolvement/StudentOrganizations.html

A brief description of gardens, farms, community supported agriculture (CSA) or fishery programs, and urban agriculture projects where students are able to gain experience in organic agriculture and sustainable food systems:

The goal of the UC Irvine Garden Project is to create a vibrant, coordinated garden community that serves as a laboratory for hands-on sustainability education, professional development, community engagement, and research on creating sustainable communities. Initially, the project is helping to facilitate communication and collaboration among the four UC Irvine community gardens to foster increased sharing of resources, labor, gardening know-how, food, and fun. In addition, the project aims to establish linkages with the broader community involved in sustainable food production in Orange County, particularly in low-income communities. Through this engagement, we are not only enriching student understanding of food sustainability and sovereignty through the lens of social, economic and environmental justice, but also working with faculty to foster community-engaged sustainability scholarship on these issues.

UC Irvine has four main gardens:

1. ASUCI Garden (also called known as Arroyo Vista or Ants in your Plants Garden):
The primary goal of the ASUCI garden is to provide UC Irvine students an opportunity to learn about the food system through garden volunteering, workshops, and curriculum integration. The garden operates like an urban farm where the garden volunteers and coordinators have global jurisdiction over all the plots. Undergraduate students maintain this garden as a student club. The garden is student governed and open to anyone in the UC Irvine community. Activities include event and workshop planning, publicity, volunteer management, collaboration with administration and faculty, and hands-on gardening. Intern positions are available.

2. Anthill Village Community Garden: Originally established in 1985, the garden site is located along Anteater Drive between Palo Verde Road and California Avenue. The garden is a maintained as a Student Club. There are 99 garden plots and 100 people on the waiting list.

3. Verano Place: The Verano Garden is an organic garden that exists to provide an opportunity for Verano Place residents to garden a communal setting. It is a place to work the earth alongside fellow residents you might not otherwise meet, and to share gardening knowledge. It is also an opportunity to increase sustainability by growing food locally, and recycle garden green waste and community kitchen waste. Verano Place Garden is student-governed.

4. The Palo Verde Organic Garden is a resident-run community garden at UCI's Palo Verde student housing complex. The garden is all organic—so no commercial pesticides, chemical fertilizers, or herbicides are permitted. Membership is open to all Palo Verde residents; it is student governed.

Other agriculture-related projects on campus include:

UC Irvine Aquaponics is a student-governed and led project which features the symbiotic cultivation of plants and aquatic animals in a balanced recirculating environment. The project's primary goal is to demonstrate that aquaponics is an economically feasible and environmentally sustainable method for the local generation of food in Irvine, California. Accordingly, our research goals are to define the parameters that optimize aquaponic system efficiency, sustainability, and economy in a university context. With aquaponics, campus food waste promises to be diverted into fish food, which in turn fertilizes the growth of edible vegetables. This closed loop method simultaneously conserves significant water resources while much of California struggles in extreme drought. Finally, UC Irvine Aquaponics is poised to provide structured, experiential learning for UCI students, as well as local elementary, middle, and high school students.

University Hills: The University Hills neighborhood on campus is the target site of a new permaculture and sustainable garden guild program. The National Science Foundation has awarded doctoral student Juliette Norton a $400,000 grant to develop this permaculture site on campus. The guild is in development and is student-governed.

The UCI Arboretum is a 12.5-acre botanic garden and research facility located approximately one mile from the main campus. The Arboretum features plants and communities from the California Floristic Province and also has an extensive collection of South African species. The faculty director of The Arboretum regularly sponsors educational tours for students, faculty, staff and visitors to interact with the garden.

The UCI Shadetree Nursery program is a long-term community partnership that provides shade trees and support for community tree planting projects throughout southern California. The nursery was founded through a three-way partnership among UCI, the Irvine Ranch Water District (IRWD), and the non-profit Shadetree Partnership.

UCI's Alternative Break Program places teams of college students in communities to engage in community service and experiential learning during their winter or spring break. One of the Alternative Break projects directly related to sustainable farming is summarized at the website shown below:

http://www.ccc.uci.edu/communityengagement/Alternative_Break.php

Hungry for Change: Food Justice, Sustainability, and Access
Food plays a major role in our globalized economy. Through mass-production, our nation has become the leading exporter in food. Despite being the top provider in the food industry, one in six Americans is struggling with hunger. Many are finding themselves living in food deserts where healthy and affordable food is difficult to obtain. In this program, we will focus on the issues of food justice, sustainability, and access. We will be working with various organizations and urban farming facilities in the California Bay Area to gain an understanding on the production, distribution, and consumption of food. Participants will work together to critically analyze issues in the food system and how it affects people across social disparities while exploring the concepts and principles of sustainable farming.

The UC Global Food Initiative aims to rally the broad UC community across a wide range of disciplines to work toward putting the world on a path to sustainably and nutritiously feed itself. The UC Office of the President, along with additional support from the UC Irvine Sustainability Initiative and Undergraduate Research Opportunities Program, has enabled the first cohort of Global Food Initiative student fellowships in which 12 undergraduate and graduate student fellows are pursuing projects in sustainable food systems; the projects are student-governed. See:

http://sustainability.uci.edu/engagement/uc-global-student-fellowships/

The website URL where information about the organic agriculture and/or sustainable food systems projects and initiatives is available:

http://sustainability.uci.edu/engagement/uc-global-student-fellowships/

A brief description of student-run enterprises that include sustainability as part of their mission statements or stated purposes:

Currently, four retail locations at UC Irvine are managed by students: Alumni House Cafe■, Jamba Juice, Law School Coffee Cart, and the Cyber A Cafe■. These businesses are managed by the students but are not owned by them. At each of these student-managed locations, there is a student-designated sustainability leader (Green Captain) who oversees the sustainability efforts and has the opportunity to gain sustainable business skills. The cafe■s are coffee and/or specialty beverage locations.
See:

http://www.sustainability.uci.edu/SustainableCampus/FoodService.html

The website URL where information about the student-run enterprise(s) is available:

http://uci.campusdish.com/Sustainability/WhatWeAreDoing.aspx

A brief description of the sustainable investment or finance initiatives:

Established in 2009, The Green Initiative Fund (TGIF) is a student-led fee referendum designed to empower undergraduate students with the financial resources to fund projects related to the three main aspects of sustainability: economy, ethics, and environment. Funded by a $3.50 per quarter “sustainability student fee,” The Green Initiative Fund is a student-run funding board, housed under the Administrative Affairs division of ASUCI, for sustainable projects at UC Irvine. It is composed of five board members with voting power, and several interns. About $120,000 per academic year is available in grants to undergraduate students, organizations, or collaborations between organizations. Any UC Irvine undergraduate may submit a project proposals for consideration; projects are selected by the Grant-Making Committee composed of students, and non-voting staff and faculty. The principle goal of The Green Initiative Fund is to provide funding for projects that reduce the University’s overall impact on the environment and create a more sustainable atmosphere on campus. TGIF is student-governed.

The website URL where information about the sustainable investment or finance initiatives is available:

http://www.asuci.uci.edu/admin-affairs/tgif/

A brief description of conferences, speaker series, symposia or similar events related to sustainability that have students as the intended audience:

Research and shared learning are fundamental to the mission of UC Irvine, and students are encouraged to attend, organize and/or participate in numerous sustainability-related activities held across campus throughout the year. A number of these programs are identified below. This is by no means an all-inclusive list of such activities. Many departments across campus host seminars and conferences related directly to issues of sustainability that are open and intended for all students.

Additionally, the Global Sustainability Resource Center maintains a calendar of student sustainability activities at:

http://www.sustainability.uci.edu/StudentInvolvement/StudentSustainabilityCalendar.html

UC Irvine’s Newkirk Center for Science and Society sponsors the “Toward a Sustainable 21st Century” seminar series, which began in 2007. The seminar series allows "a foundation of global reach" and a research university to do together more than they can do separately on significant unsolved problems of global society in the areas of marine resources conservation, and threats to ecosystem and environmental health caused by toxic chemicals and the absence of effective governance structures which promote sustainability.

Seventeen programs have been presented to date, each focused on science, law and governance aspects of specific sustainability issues. For 2014, UCI hosted three conferences in the series: National Fuel Cell Symposium: Enabling the Clean Energy Paradigm (February 2014); Marine Life Protection Act and California’s Marine Protected Areas (May 2014); and Ocean Health, Global Fishing and Food

Security (November 2014).
See:

http://socialecology.uci.edu/pages/toward-sustainable-21st-century

The Newkirk Center launched "Empowering Sustainability" series in 2011. This series brings together emerging sustainability leaders from around the world, along with students from UC Irvine. It is co-sponsored by the School of Law Center for Land, Environment, and Natural Resources with active support from the School of Social Ecology.
See:

http://sites.uci.edu/empoweringsustainability/

UC Irvine's Center for Unconventional Security Affairs (CUSA) sponsors the Sustainability Seminar Series, which brings a select group of scholars, researchers, experts, and business leaders to UC Irvine to present a variety of perspectives on choices and challenges related to sustainability. The series began in 2010.
See:

http://www.cusa.uci.edu/programs-and-events/sustainability-series/2014-sustainability-lecture-s

eries/

The School of Law Center for Land, Environment, and Natural Resources hosts conferences, a lecture series, and an environmental literature and film series, all of which are open to students.
See:

http://www.law.uci.edu/academics/centers/cleanr/

The Advanced Power and Energy Program and the National Fuel Cell Research Center at UC Irvine annually host the International Colloquium on Environmentally Preferred Advanced Power Generation, which involves significant participation by affiliated graduate and undergraduate student researchers.
See:

http://www.apep.uci.edu/icepag2014/

In May 2014, UCI hosted the Edible Education at UCI: A Conversation about Food Research & Education Conference. Edible Education aimed to inspire conversation and generated excitement about food studies at UCI. The one-day conference brought together UCI faculty and students from different disciplines -– biological sciences, social sciences, humanities, social ecology, and medicine –- who shared their research and perspectives about food and explored new ways to integrate food into academics. Practitioners and faculty members

from other local institutions were invited to join and inform the conversation. Local food trucks and vendors added spice and flavor to the event.

Food serves as an excellent lens to learn about human culture and history and the systems that support our society. The objective of Edible Education was to raise awareness about current food studies offerings at UCI, encourage new classes about food, stimulate collaborative research around food issues, and create a minor in food studies.

Edible Education at UCI consisted of a keynote speaker, poster session, and three panels of faculty, students and community experts discussing:

1. Race, identity, and taste in our globalizing world;
2. Food justice issues in a domestic urban context; and
3. The use of food in the classroom and the media to explore complex issues.

The website URL where information about the event(s) is available:

http://www.sustainability.uci.edu/StudentInvolvement/StudentSustainabilityCalendar.html

A brief description of cultural arts events, installations or performances related to sustainability that have students as the intended audience:

Solar Decathlon 2015 Student Competition
A UCI-led team submitted a successful proposal to compete in the U.S. Department of Energy Solar Decathlon 2015. As one of 20 university teams selected for the international student competition, Team Orange (Orange County) is designing, building and demonstrating a net-zero-energy, solar-powered home that blends affordability, consumer appeal, and design excellence with optimal energy production and maximum efficiency. The biannual contest provides students an opportunity to explore and display sustainable design approaches, building technologies, and lifestyles. Students also gain significant community outreach experience by providing free tours of the homes during the Solar Decathlon, using the installation to showcase sustainable living.

Teaming up for their first U.S. Department of Energy Solar Decathlon competition in Fall 2015, students from the University of California, Irvine; Chapman University; Irvine Valley College and Saddleback College are building Casa del Sol, a multi-generational inspired, solar-powered house for Southern California. Comprised of a research institution, a private university, and two community colleges, Team Orange incorporates a broad range of perspectives and educational backgrounds.
See:

http://www.teamoc2015.com

The student-run ASUCI Ants in Your Plants garden (discussed elsewhere in this section) built a sustainable art sculpture out of recently decommissioned exterior ashtrays that would otherwise have gone to the landfill. The holes of the ashtray were planted with succulent plants, providing a new view to the back part of the garden. The UCI Arboretum has a sculptor-in-residence who creates public art out of materials that would otherwise be refuse. Both of these activities represent opportunities to use art installations to increase awareness and focus conversation on sustainability.

The UC Irvine Claire Trevor School of the Arts (CTSA) hosts events directed at community and student participants that often include several sustainability-related activities. The CTSA Family Day scheduled for April 2015 invites community and student participants to enjoy hands-on art and science projects and experience an introduction to new media art, including demonstrations by local companies in materials, manufacturing, programming, engineering, optics, and design.

Art Lab is a quarterly art walk-like event sponsored by the Associated Students of the University of California, Irvine. The theme of the December 3, 2014, event was "Sustainability." More than 15 individuals participated in this event.
See:

http://www.newuniversity.org/2014/12/entertainment/art-lab-goes-green-expression-in-sustainability/

The website URL where information about the cultural arts event(s) is available:

http://www.newuniversity.org/2014/12/entertainment/art-lab-goes-green-expression-in-sustainability/

A brief description of wilderness or outdoors programs for students that follow Leave No Trace principles:

The Outdoor Adventure and Boating Program at UC Irvine provides participants opportunities to get outdoors in a variety of classes, trips and paddles. It also includes a 35-foot indoor climbing wall contained within the Anteater Recreation Facility. Programs include backpacking, camping, rock climbing, snowshoeing, SCUBA, surfing, sailing, kayaking and stand up paddle boarding. All of these programs operate within the Leave No Trace principles of wilderness ethics. UCI also uses recreation trips as opportunities to teach participants about the Leave No Trace ethics since there is a strong likelihood that these people will continue to engage in outdoor activities after their college career is completed.

UCI Hospitality & Dining, in partnership with Dr. Peter Bowler, offers a series of Local Foods Tours at the UCI Arboretum and San Joaquin Middle Marsh. Through these events, students learned about local native and non-native edible plants to better understand sustainability within the region. These events followed Leave No Trace principles.

The website URL where information about the wilderness or outdoors program(s) is available:

http://www.campusrec.uci.edu/

A brief description of sustainability-related themes chosen for themed semesters, years, or first-year experiences:

The website URL where information about the theme is available:

A brief description of program(s) through which students can learn sustainable life skills:

EARTH Reps is a student-led sustainability leadership program for freshmen. UC Irvine EARTH Rep students serve as residence hall-based sustainability ambassadors throughout the academic year by expanding campus awareness about sustainability and building community among students, staff, and faculty. This outreach includes sustainable life skills learning. Twenty-nine freshman leaders served as EARTH Reps in Spring 2014.

UCI Hospitality & Dining features cooking demonstrations focused on eating healthy in the residential dining commons, includes a Healthy for Life program for students to better understand portioning, daily recommendations and how to create a holistic diet, and also participates in a variety of health fairs for students, staff and faculty. Dining also works with the MyFitnessPal app to make the selection of healthy choices simple for those eating on campus.

The website URL where information about the sustainable life skills program(s) is available:

A brief description of sustainability-focused student employment opportunities:

A student-designated sustainability leader (Green Captain) oversees the sustainability efforts at all of the dining options available to students. Green Captains assess areas where the dining facilities can make better improvements towards sustainable practices in their food service.

The website URL where information about the student employment opportuntities is available:

http://www.sustainability.uci.edu/SustainableCampus/FoodService.html

A brief description of graduation pledges through which students pledge to consider social and environmental responsibility in future job and other decisions:

The website URL where information about the graduation pledge program is available:

A brief description of other co-curricular sustainability programs and initiatives:

At UC Irvine, co-curricular sustainability programs emerge from multiple campus units and student-led initiatives. We consider this distributed network a strength. UC Irvine leverages this strength through the Global Sustainability Resource Center (GSRC), a campus-wide hub for co-curricular sustainability programming.

GSRC Vision. The GSRC unleashes youth leadership for community resilience to a changing climate. This challenge informs our students' academic pursuits, career choices, and ways of life. As the University of California steps up as a global force for climate resilience, GSRC enables UC Irvine students to shape this legacy.

Mission. The GSRC is a hub for students and community partners to co-create and experience an integrated, holistic resilience framework that addresses the root causes of sustainability crises and deepens understanding of the interdependence of all life.

Pathways and Programs. Our student and staff team co-creates actions with campus and community partners that build skills and experience along three sustainability pathways:

Campus as a Living Lab Pathway,
Organizing Pathway, and
Communiversity Pathway.

Along any pathway, students accelerate learning and integration as their actions draw them into our Training Program and Community & Network Building Program. Students also come into the Center via our Affirmative Outreach Program and Internships & Fellowships Program.

First incubated by former UC Irvine Environment Institute, the Resource Center is now supported by a partnership among Student Affairs, Division of Undergraduate Education, and the Sustainability Initiative. It is shaped by the input from students, guided by the support of staff, and modeled after many existing sustainability resource centers at other University of California campuses.

The website URL where information about other co-curricular sustainability programs and initiatives is available:

http://sustainability.uci.edu/studentinvolvement/gsrc/

Outreach Materials and Publications

Responsible Party

Kathy Haq
Manager of Special Projects
Administrative and Business Services

Criteria

Institution produces outreach materials and/or publications that foster sustainability learning and knowledge. The publications and outreach materials may include the following:

- A central sustainability website that consolidates information about the institution's sustainability efforts
- A sustainability newsletter
- Social media platforms (e.g. Facebook, Twitter, interactive blogs) that focus specifically on campus sustainability
- A vehicle to publish and disseminate student research on sustainability
- Building signage that highlights green building features
- Food service area signage and/or brochures that include information about sustainable food systems
- Signage on the grounds about sustainable groundskeeping and/or landscaping strategies employed
- A sustainability walking map or tour
- A guide for commuters about how to use alternative methods of transportation
- Navigation and educational tools for bicyclists and pedestrians (e.g. covering routes, inter-modal connections, policies, services, and safety)
- A guide for green living and incorporating sustainability into the residential experience
- Regular coverage of sustainability in the main student newspaper, either through a regular column or a reporter assigned to the sustainability beat
- Other

A single outreach material or publication that serves multiple purposes may be counted more than once. For example, a sustainability website that includes tools for bicyclists and pedestrians may be counted in both categories.

"---" *indicates that no data was submitted for this field*

Does the institution produce the following outreach materials and/or publications that foster sustainability learning and knowledge? :

	Yes or No
A central sustainability website that consolidates information about the institution's sustainability efforts	Yes

A sustainability newsletter	Yes
Social media platforms that focus specifically on campus sustainability	Yes
A vehicle to publish and disseminate student research on sustainability	Yes
Building signage that highlights green building features	Yes
Food service area signage and/or brochures that include information about sustainable food systems	Yes
Signage on the grounds about sustainable groundskeeping and/or landscaping strategies employed	Yes
A sustainability walking map or tour	Yes
A guide for commuters about how to use alternative methods of transportation	Yes
Navigation and educational tools for bicyclists and pedestrians	Yes
A guide for green living and incorporating sustainability into the residential experience	Yes
Regular coverage of sustainability in the main student newspaper, either through a regular column or a reporter assigned to the sustainability beat	No
Other sustainability publications or outreach materials not covered above	Yes

A brief description of the central sustainability website:

UC Irvine's sustainability website provides a central location for students, faculty, staff, and the public to find information about sustainability news and events, policies and practices, curriculum, research, opportunities, and student and community engagement.

The website URL for the central sustainability website:

http://www.sustainability.uci.edu/

A brief description of the sustainability newsletter:

UCI's Global Sustainability Resource Center publishes the weekly GSRC Digest, which is distributed via email to interested members of the campus community. The Digest includes information about sustainability events and opportunities.

UCI Hospitality & Dining publishes a monthly sustainability newsletter to promote upcoming sustainability events and educate the campus about sustainable practices. The newsletter is sent to subscribers via email.

The website URL for the sustainability newsletter:

http://www.sustainability.uci.edu/gsrc

A brief description of the social media platforms that focus specifically on campus sustainability:

"The Anteaters Go Green Blog" is student-managed and characterizes itself as a "one-stop-shop for information about UC Irvine's efforts as a global and community sustainability leader." It includes "writings from UC Irvine students about sustainability, ways to get involved in leadership opportunities on and off campus, and a plethora of campus resources." See:

https://ucigsrc.wordpress.com/

UCI's Global Sustainability Resource Center has a Facebook page at

https://www.facebook.com/ucigsrc

Salton Sea Initiative Blog

http://sites.uci.edu/saltonsea/blog-and-news/

Bike UCI Blog

http://sites.uci.edu/bikeuci/

UC Irvine Hospitality & Dining Services uses sustainability-focused social media (Facebook and Twitter) to convey facts and tips for being sustainable as well as information about outreach and education events.
• Facebook:

https://www.facebook.com/ucidining

• Instagram:

http://instagram.com/ucidining

• Twitter:

https://twitter.com/UCIDining

The Center for Unconventional Security Affairs (CUSA) hosts a Facebook page at

https://www.facebook.com/CUSAUCI

. CUSA is the hub of a global network based at UCI that studies environmental and human security challenges through innovative research, education and public service activities. CUSA also has a Twitter account:

https://twitter.com/CUSAatUCI

2014 UCI Costa Rica Program

http://sites.uci.edu/costaricaprogram/category/2014-blog/

The website URL of the primary social media platform that focuses on sustainability:

https://www.facebook.com/ucigsrc

A brief description of the vehicle to publish and disseminate student research on sustainability:

The "UCI Undergraduate Research Journal," produced by the Undergraduate Research Opportunities Program, is a compilation of outstanding papers submitted by UCI undergraduate students from all disciplines who have completed faculty-mentored research projects or creative activities. It provides a forum for UCI's best undergraduate researchers to showcase their work while enlightening students, the UCI community, high schools, community colleges, funding agencies, and corporations about the strength of UCI's undergraduate research community.

UROP also sponsors the UCI Undergraduate Research Symposium, an annual event held in May that allows hundreds of undergraduates the opportunity to present the results of their research or creative activities in a professional setting. Information about student projects is available online. See:

http://www.urop.uci.edu/symposium.html

As a final project for Global Sustainability B, the senior capstone students produced informational posters on a variety of sustainability topics. Students displayed and discussed their work in a public poster session on campus on March 12, 2015. Topics included "Seismic Resilience," "Sustainable Fashion," "Ocean Plastic Pollution," "Food Desert," "Community Supported Fisheries," "Sustainable Landscaping," and "Sustainable Coffee." Similar poster sessions are planned for future sessions of this class.

The website URL for the vehicle to publish and disseminate student research on sustainability:

http://www.urop.uci.edu/journal.html

A brief description of building signage that highlights green building features :

UC Irvine has decals or glass plaques for LEED buildings. The campus highlights green building features on the Sustainability website.

The website URL for building signage that highlights green building features :

http://www.sustainability.uci.edu/SustainableCampus/GreenBuildings.html

A brief description of food service area signage and/or brochures that include information about sustainable food systems:

UCI Hospitality & Dining provides educational signage at all campus retail outlets and dining commons. The information covers such topics as: healthy and sustainable eating; water conservation; minimizing food waste; reusable and recyclable containers; water bottles, and mugs; zero-waste; and recycling. The information also is available at the website shown below.

The website URL for food service area signage and/or brochures that include information about sustainable food systems:

http://uci.campusdish.com/Sustainability/WhatWeAreDoing.aspx

A brief description of signage on the grounds about sustainable groundskeeping and/or landscaping strategies:

Signage around the campus indicates that UC Irvine uses recycled water to irrigate main campus vegetation.

The website URL for signage on the grounds about sustainable groundskeeping and/or landscaping strategies:

http://www.ceplanning.uci.edu/greengold.html

A brief description of the sustainability walking map or tour:

The sustainability walking and biking tour highlights green building, transportation, and renewable energy on campus. The walking tour directs visitors around the Ring Mall where they can view LEED Platinum and Gold buildings, bike share stations (ZotWheels), the National Fuel Cell Research Center, and the car share program (Zipcar). The biking tour directs visitors to east campus where they can see the concentrated photovoltaic solar panels, community gardens, and habitat restoration efforts.

The website URL of the sustainability walking map or tour:

http://www.sustainability.uci.edu/About/walking%20tour.pdf

A brief description of the guide for commuters about how to use alternative methods of transportation:

UC Irvine's award-winning Sustainable Transportation program encourages students, faculty, and staff to limit the number of cars UCI puts on the road. The program encourages the UCI community to walk, bike, carpool, vanpool, ride a shuttle, take a train, ride a bus, share a care, or share a bike.

The website URL for the guide for commuters about how to use alternative methods of transportation:

http://www.parking.uci.edu/AT/

A brief description of the navigation and educational tools for bicyclists and pedestrians:

UC Irvine publishes a Campus Bike Map and publishes information in concert with BikeMetro to encourage bicyclists to commute to and from campus safely. The Bicycle Education & Enforcement Program (B.E.E.P.) is a partnership between UC Irvine's Transportation and Distribution Services Department and the UCI Police Department.

Since 1976, UC Irvine has also had a cycling club, Anteater Cycling, which supports recreational and competitive cycling in the UC Irvine community. See:

http://clubs.uci.edu/bike/about/

ZOTFinder is a mobile application specifically designed for the UCI campus. It allows users to search for faculty, buildings, departments or services on campus whose location can then be displayed on a map for easy identification. A routing feature then provides users with the shortest path to their destination.

The website URL for navigation and educational tools for bicyclists and pedestrians:

http://bike.uci.edu/

A brief description of the guide for green living and incorporating sustainability into the residential experience:

"Anteaters Go Green: A Guide to Sustainability Classes, Resources and Living at UCI" was created by students for students. It has information about sustainability education, sustainability resources on campus, and sustainable living. The Guide is shared by EARTH Reps, a sustainability leadership program for freshmen living in UC Irvine resident halls. EARTH Reps serve as residence hall-based sustainability ambassadors throughout the academic year by expanding student awareness and building community among students, staff, and faculty. GSRC offers EARTH Reps a monthly training on a sustainability topic plus action planning.

The Alliance to Save Energy's PowerSave Green Campus Program encourages green living and sustainability in campus residential units. It is a student-driven energy efficiency workforce education and training program that generates actual energy savings and trains the next generation of energy efficiency professionals. The group has a web page and posts a monthly newsletter, "The Green Vine," online. See:

http://powersavecampusuci.weebly.com/

The website URL for the guide for green living and incorporating sustainability into the residential experience:

http://www.sustainability.uci.edu/StudentInvolvement/anteatergogreenguide.pdf

A brief description of regular coverage of sustainability in the main student newspaper, either through a regular column or a reporter assigned to the sustainability beat:

The website URL for regular coverage of sustainability in the main student newspaper, either through a regular column or a reporter assigned to the sustainability beat:

A brief description of another sustainability publication or outreach material not covered above (1st material):

UCI News, the website administered by the campus's Strategic Communications office, frequently highlights campus sustainability news

UCI Brief, a weekly compendium of campus news, is distributed via email to all campus employees and includes timely sustainability-related items.

The website URL for this material (1st material):

http://news.uci.edu/

Does the institution produce another sustainability publication or outreach material not covered above? (2nd material):

Yes

A brief description of this material (2nd material):

The “Empowering Sustainability International Journal” (ESIJ) is an interdisciplinary open access online publication of peer reviewed papers that aims at connecting scholars and practitioners through the exchange of ideas, opinions, and experiences related to all aspects of sustainability. The journal values different ways of knowing, creativity, collaborations, practice-based theorizing, and rethinking of concepts such as empowerment, sustainability, development, democracy, and justice.

The website URL for this material (2nd material):

http://escholarship.org/uc/esij

Does the institution produce another sustainability publication or outreach material not covered above? (3rd material):

Yes

A brief description of this material (3rd material):

The UCI Center for Unconventional Security Affairs, which focuses on meeting the human and environmental security challenges of the 21st century, publishes a monthly newsletter that is distributed via email and posts current information on CUSA's website.

In addition, Dr. Richard Matthew, CUSA's Director and UCI's Professor of Planning, Policy and Design and Political Science, has recently finished a four volume series detailing the main and most imperative topics of environmental security. See:

http://www.cusa.uci.edu/2014/12/cusa-director-publishes-four-volume-set-on-environmental-securi

ty/

The website URL for this material (3rd material):

http://www.cusa.uci.edu/news/

Does the institution produce another sustainability publication or outreach material not covered above? (4th material):

Yes

A brief description of this material (4th material):

The Campus Sustainability Calendar highlights public sustainability-related activities occurring on campus.

The website URL for this material (4th material):

http://www.sustainability.uci.edu/Events/index.html

Does the institution produce another sustainability publication or outreach material not covered above? (5th material):

Yes

A brief description of this material (5th material):

The Student Sustainability Calendar highlights student-oriented sustainability-related activities.

The website URL for this material (5th material):

http://www.sustainability.uci.edu/StudentInvolvement/StudentSustainabilityCalendar.html

Does the institution produce another sustainability publication or outreach material not covered above? (6th material):

Yes

A brief description of this material (6th material):

The Center for Land, Environment, and Natural Resources (CLEANR) hosts a website that includes information about the centers' Environmental Literature & Film Series, a Speakers Series, the Summer Sustainability Series, Workshop Roundtables, and past conferences.

The website URL for this material (6th material):

http://www.law.uci.edu/academics/centers/cleanr/events/

Does the institution produce another sustainability publication or outreach material not covered above? (7th material):

Yes

A brief description of this material (7th material):

The Newkirk Center for Science and Society -- established in 2001 to improve science's response to community needs and to increase the effective uses of scientific information for the benefit of society – has a robust website that features information about upcoming and past sustainability-focused events.

The website URL for this material (7th material):

http://newkirkcenter.uci.edu/

Does the institution produce another sustainability publication or outreach material not covered above? (8th material):

A brief description of this material (8th material):

The website URL for this material (8th material):

Outreach Campaign

Responsible Party

Kathy Haq
Manager of Special Projects
Administrative and Business Services

Criteria

Part 1

Institution holds at least one sustainability-related outreach campaign directed at students that yields measurable, positive results in advancing sustainability. The sustainability-related outreach campaign may be conducted by the institution, a student organization, or students in a course.

Part 2

Institution holds at least one sustainability-related outreach campaign directed at employees that yields measurable, positive results in advancing sustainability. The sustainability-related outreach campaign may be conducted by the institution or an employee organization.

The campaign(s) reported for this credit could take the form of a competition (e.g. a residence hall conservation competition), a rating or certification program (e.g. a green labs or green office program), and/or a collective challenge (e.g. a campus-wide drive to achieve a specific sustainability target). A single campus-wide campaign may meet the criteria for both parts of this credit if educating students is a prime feature of the campaign and it is directed at both students and employees.

To measure if a campaign yields measurable, positive results, institutions should compare pre-campaign performance to performance during or after the campaign. The following impacts are not sufficient for this credit:

- Increased awareness
- Additional members of a mailing list or group

Submission Note:

The individuals who provided responses for this credit are:

Tyson Monagle
Sustainability Coordinator, Aramark Higher Education
UCI Hospitality & Dining

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Anne Krieghoff
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Facilities Management, UC Irvine

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The campus's Facilities Management recycle team, Waste Management of Orange County and Aramark Campus Dining Services have worked together to curb food waste since 2010, when Waste Management opened its food waste and organics recycling facility in Orange and accepted UC Irvine as a pilot-phase partner. Food waste delivered to the facility is processed and transformed into a Waste Management proprietary organic bio-slurry that has a number of sustainability applications, including the creation of green energy.

The success of this partnership captured the imagination of Bob Perciasepe, the Environmental Protection Agency's deputy administrator, who joined a cafeteria line at UC Irvine on September 27, 2013, and commended the campus on its zero-waste and food recovery achievements. See:
http://news.uci.edu/press-releases/epa-deputy-administrator-joins-uci-students-for-earth-friendly-lunch/

"---" *indicates that no data was submitted for this field*

Has the institution held at least one sustainability-related outreach campaign directed at students within the previous three years that has yielded measurable, positive results in advancing sustainability?:

Yes

Has the institution held at least one sustainability-related outreach campaign directed at employees within the previous three years that has yielded measurable, positive results in advancing sustainability?:

Yes

The name of the campaign (1st campaign):

Weigh the Waste (employee & student campaign)

A brief description of the campaign (1st campaign):

Weigh the Waste is a bi-quarterly event held in the on-campus dining commons through which the UCI Hospitality & Dining Green Captain* team and the Sustainability Coordinator educate students about the environmental impact of food waste and the power students have to alter the footprint they leave behind. Students can see directly how much food is wasted in a single meal period. Green Captains also provide students with simple tips to reduce food waste and celebrate successes when students come to the bins with no waste. By letting students see the impact, educating them with steps they can take to reduce waste, and engaging them through activities and incentives (such as a bonus themed meal), this campaign successfully reduces post-consumer waste. Additionally, through feedback gathered during events about portion sizes and taste and texture, we are able to alter our food preparation to reduce waste by increasing customer satisfaction and to ensure recipes are followed correctly. This involves educating employees about how better preparation can also reduce waste.

*UCI Hospitality & Dining identifies student employees who are passionate about sustainability to be Green Captains each year. Green Captains are responsible for implementing practices designed to reduce the environmental impact of campus dining locations and for educating students through events about environmental sustainability and UCI Hospitality & Dining.

A brief description of the measured positive impact(s) of the campaign (1st campaign):

Waste per person has continued to decrease each year. In October 2012, those dining in the residential dining commons wasted an average of 2.42 ounces per person. By October 2013, per-diner food waste had dropped to 1.7 ounces per person and by October 2014, it dropped to 1.44 ounces per person.

The website URL where information about the campaign is available (1st campaign):

http://uci.campusdish.com/Sustainability/WhatWeAreDoing.aspx

The name of the campaign (2nd campaign):

Pick a Plate (employee & student campaign)

A brief description of the campaign (2nd campaign):

Employees at Panda Express at UC Irvine encourage customers to choose a recyclable/compostable plate rather than a to-go container for their meals, as each plate uses approximately one-third material by weight. The Green Captains at Panda Express work within the location to promote the importance of this practice to other employees in reducing waste at the source.

A brief description of the measured positive impact(s) of the campaign (2nd campaign):

Prior to the campaign, all customers were given bowls or to-go containers. No plates were used previously at the location, so all plate use is attributed to the success of the campaign. Plate use increased as employee buy-in was established, customer-facing signage was developed, and the message to customers was refined to focus on the environmental benefits of choosing a plate. Plate use increased over three weeks from 450 plates per week during the pilot week to more than 800 plates per week, diverting 1.78 Metric Tons of Carbon Equivalent per academic quarter (10-week period).

The website URL where information about the campaign is available (2nd campaign):

http://uci.campusdish.com/Sustainability/WhatWeAreDoing.aspx

A brief description of other outreach campaigns, including measured positive impacts:

UC Irvine actively encourages students to participate in RecycleMania, a national competition among colleges and universities to determine which institutions have the best recycling programs. The 2014 competition involved 461 schools, and UC Irvine placed 5th in the Grand Champion category, which combines trash and each of the core recyclable materials to determine a school’s recycling rate as a percentage of its overall waste generation. To be ranked in this category, schools must provide their trash, paper, cardboard, and cans and bottles weights. The winner has the highest recycling rate, which means that they have reduced trash disposal through waste prevention and have a strong recycling program for the acceptable materials. UC Irvine also placed 5th in RecycleMainia's Gorilla category, which recognizes schools that recycle the highest gross tonnage of combined paper, cardboard and bottle and cans, regardless of campus population. Winners of this competition are typically large universities with extensive recycling programs. Over the course of the eight-week competition, UC Irvine had a recycling rate of 69.5 percent.

Detailed information is available at

http://www.recyclemaniacs.org/2014results

UCI has started a water conservation campaign called "Text to Conserve." By texting

water@uci.edu

, UCI students, faculty, staff and guests can tell us about suspected water waste on campus. This can be anything from a broken sprinkler head, broken faucet, or a leaking piece of lab equipment. Users text information and photos to the Facilities Management Service Desk; an automatic response is sent to thank the sender while at the same time a work order is put in place to evaluate and address the water issue. Through this outreach programs, Facilities Management is getting 3-4 tips a week. This allows the campus to quickly address many water issues and gives the campus community an easy way to get involved in the campus's water-savings efforts. The program has been announced in electronic newsletters and emails, and shared at student events. The program has a mascot, Hydro, and students pose for photos with him when he is in the field.

Employee Educators Program

Criteria

Institution administers or oversees an ongoing faculty/staff peer-to-peer sustainability outreach and education program.

In the program, employee sustainability educators are formally designated and receive formal training or participate in an institution-sponsored orientation. The institution offers financial or other support to the program.

This credit recognizes ongoing programs that engage employees on a regular basis. For example, employee educators may represent or be responsible for engaging workers in certain departments or buildings. Thus, a group of employees may be served (i.e. directly targeted) by a program even if not all of these employees avail themselves of the outreach and education offerings.

Training and/or professional development opportunities in sustainability for staff are excluded from this credit. These activities are covered in *EN 8: Staff Professional Development*.

This credit was marked as **Not Pursuing** so Reporting Fields will not be displayed.

Employee Orientation

Criteria

Institution covers sustainability topics in new employee orientation and/or in outreach and guidance materials distributed to new employees, including faculty and staff. The topics covered include multiple dimensions of sustainability (i.e. social, environmental and economic).

This credit was marked as **Not Pursuing** so Reporting Fields will not be displayed.

Staff Professional Development

Criteria

Institution makes available training and/or other professional development opportunities in sustainability to all staff at least once per year.

Separate training opportunities for each department would count for this credit, as long as each staff member has an opportunity to learn about sustainability at least once per year. It is not necessary that each staff member attend such trainings; the credit is based on making training available to all staff.

This credit applies to staff members only; it does not include faculty members.

The following training opportunities are not sufficient for this credit:

- Specialized training for a small group of staff
- The opportunity to participate in an institutional sustainability committee or group

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This credit was marked as **Not Pursuing** so Reporting Fields will not be displayed.

Public Engagement

This subcategory seeks to recognize institutions that help catalyze sustainable communities through public engagement, community partnerships and service. Engagement in community problem-solving is fundamental to sustainability. By engaging with community members and organizations in the governmental, non-profit and for-profit sectors, institutions can help solve sustainability challenges. Community engagement can help students develop leadership skills while deepening their understandings of practical, real-world problems and the process of creating solutions. Institutions can contribute to their communities by harnessing their financial and academic resources to address community needs and by engaging community members in institutional decisions that affect them. In addition, institutions can contribute toward sustainability broadly through inter-campus collaboration, engagement with external networks and organizations, and public policy advocacy.

Credit
Community Partnerships
Inter-Campus Collaboration
Continuing Education
Community Service
Community Stakeholder Engagement
Participation in Public Policy
Trademark Licensing
Hospital Network

Community Partnerships

Criteria

Institution has one or more formal partnership(s) with the local community, including school districts, government agencies, non-profit organizations, businesses and/or other entities, to work together to advance sustainability within the community.

Each partnership conforms to one of the following types:

Type of Partnership	Indicators
A. Supportive	• *Scope:* Addresses a sustainability topic or a specific aspect of sustainability (e.g. community garden, environmental remediation, community environmental health and education) • *Duration:* May be time-limited (short-term projects and events), multi-year, or ongoing • *Commitment:* Institutional involvement may include financial and/or staff support or may be limited to resource sharing and/or endorsement • *Governance:* Campus and community leaders or representatives are engaged in program/project development
B. Collaborative	• *Scope:* Addresses one or more sustainability challenge and may simultaneously support social equity and wellbeing, economic prosperity, and ecological health (e.g. a green jobs program in an economically disadvantaged neighborhood) • *Duration:* May be time-limited, multi-year, or ongoing • *Commitment:* Institution provides faculty/staff, financial, and/or material support • *Governance:* Campus and local community members are both engaged in program/project development, from agenda setting and planning to decision-making, implementation and review

C.Transformative	• *Scope:* Catalyzes community resiliency and local/regional sustainability by simultaneously supporting social equity and wellbeing, economic prosperity, and ecological health on a community or regional scale (e.g. “transition” projects and partnerships focused on community adaptation to climate change) • *Duration:* Is multi-year or ongoing and proposes or plans for institutionalized and systemic change • *Commitment:* Institution provides faculty/staff and financial or material support • *Governance:* Partnership has adopted a stakeholder engagement framework through which community members, vulnerable populations, faculty, staff, students and other stakeholders are engaged in program/project development, from agenda setting and planning to decision-making, implementation and review

An institution may have multiple partnerships of each type, however no single partnership may be both supportive and collaborative, collaborative and transformative, or supportive and transformative.

Recognizing the diversity of forms that community partnerships may take, it is not required that a partnership meet all of the criteria listed to be considered supportive or collaborative. A partnership must meet all of the criteria listed to be considered transformative, however. For further guidance in identifying community partnerships that meet the criteria for each type, see the Credit Example in the STARS Technical Manual.

This credit recognizes campus-community partnerships that advance sustainability in an explicit and participatory way. Participatory, community-based research and engaged scholarship around issues of sustainability may be included if it involves formal partnership(s). Although community service activities (e.g. academic service learning, co-curricular service learning and volunteer activities, Work-Study community service and paid community service internships) may involve local partnerships and contribute toward sustainability, they are not included in this credit. Community service is covered by *EN 12: Community Service*.

This credit was marked as **Not Pursuing** so Reporting Fields will not be displayed.

Inter-Campus Collaboration

Responsible Party

Kathy Haq
Manager of Special Projects
Administrative and Business Services

Criteria

Institution collaborates with other colleges and universities to support and help build the campus sustainability community.

See the Credit Example in the STARS Technical Manual for guidance on identifying appropriate collaborations.

Submission Note:

Wendell Brase, UCI's vice chancellor for administrative and business services, contributed to the white paper titled, "Higher Education: Leading the Nation to a Safe and Secure Energy Future," jointly published by the American College & University Presidents Climate Commitment, NACUBO, and Second Nature. See: http://www.nacubo.org/Documents/BusinessPolicyAreas/Leading%20the%20Nation%20White%20Paper.pdf

"---" *indicates that no data was submitted for this field*

Does the institution collaborate with other colleges and universities to support and help build the campus sustainability community?:

Yes

A brief summary of papers, guides, presentations, and other resources the institution has developed to share their sustainability experience with other institutions:

UC Irvine actively seeks opportunities to share information about its award-winning sustainability practices in the area of energy efficiency, green building, transportation, food services, and waste minimization. Campus representatives make dozens of presentations at conferences and symposia throughout the year; many of these events attracting audiences not only from higher education but also from government and the private sector. Most of the presentations are posted online for conference attendees. UC Irvine readily shares information on its websites, provides copies of papers and presentations, and has hosted other campuses for sustainability-oriented tours and briefings.

SMART LABS INITIATIVE
UC Irvine gets frequent requests to share information about its Smart Labs Initiative, a proven, comprehensive energy-savings program that involves re-engineering building control systems in already-energy-efficient laboratory buildings from bottom to top to safely reduce energy consumption by an average of 60 percent. The program is the cornerstone of UC Irvine's partnership in the Department of Energy's Better Buildings Challenge, and a key focus of that program is the sharing of best practices. In calendar years 2012-2014, UCI staff participated in more than two dozen outreach activities ranging from providing half-day Smart Labs seminars to speaking at national and international conferences, as well as hosting various universities at UCI to discuss energy management and green building practices.

Below are just some of the outreach activities conducted in 2014:
-- Purdue University team at UCI (Jan. 30)
-- ACCO Climate Leadership Summit (Feb. 25)
-- 2nd Annual Hawaii Sustainability in Higher Education Summit (March)
-- Boston Green Ribbon Commission Green Labs Symposium (March 25 at Harvard)
-- University of California Capital Programs Institute: Smart Labs for University of California and California State University Campuses (a half day workshop at UCI on April 24)
-- DOE Better Buildings Summit (May 9)
-- ACCO Climate Strategies Forum Bootcamp (May 12)
-- University of Minnesota team at UCI (May 16)
-- NACUBO Annual Meeting (July)
-- University of Hawai'i campuses, Hawai'i community colleges, and Hawai'i Energy representatives at UCI (July 24)
-- Danish Ministry of Climate, Energy and Buildings representative at UCI (July)
-- I2SL Annual Conference (Sept. 22)
-- The Sustainable Laboratories Conference coordinated by Nanyang Technological University (Oct. 29 in Singapore)
-- National Renewable Energy Laboratory visitor at UCI (Nov. 18)

See also:

http://www.ehs.uci.edu/programs/energy/

The names of local, state/provincial, regional, national, or international campus sustainability organizations or consortia in which the institution participates and/or is a member:

American College & University Presidents' Climate Commitment (ACUPCC)
See:

http://www.presidentsclimatecommitment.org/

APPA (promoting leadership in educational facilities management)
See:

https://www.appa.org/index.cfm

Association for the Advancement of Sustainability in Higher Education (AASHE)
See:

http://www.aashe.org/

Association for Commuter Transportation
See:

http://actweb.org/

Association of Pedestrian and Bicycle Professionals
See:

http://www.apbp.org/

Big 10 & Friends Environmental Stewardship Group
See:

http://greenbigten.msu.edu/index.html

International Institute for Sustainable Laboratories (I2SL)
See:

http://www.i2sl.org/

League of American Bicyclists
See:

http://bikeleague.org/

MomentUS/ecoAmerica
See:

http://solutiongeneration.org/leaders

National Association of College and University Business Officers (NACUBO) Sustainability Advisory Panel
See:

http://www.nacubo.org/Business_and_Policy_Areas/Sustainability.html

S-Lab/Home of Higher Education Environmental Performance Improvement

http://www.goodcampus.org/s-lab/index.php

U.S. Department of Energy Better Buildings Alliance (Higher Education Sector)
See:

https://www4.eere.energy.gov/alliance/sectors/private/higher-education

U.S. Department of Energy Better Buildings Challenge
See:

https://www4.eere.energy.gov/challenge/partners/better-buildings/university-of-california-irvin

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UC-CSU-IOU Energy Efficiency Partnership
See:

http://www.uccsuiouee.org/

U.S. Green Building Council
See:

http://www.usgbc.org/

A brief summary of additional ways the institution collaborates with other campuses to advance sustainability :

UC PRESIDENT'S GLOBAL CLIMATE LEADERSHIP COUNCIL (GCLC)
University of California President Janet Napolitano established the GCLC in June 2014 to leverage the power of UC's 10 campuses with the goal of bringing the university's operations to climate neutrality by 2025. In announcing her vision for the council, Napolitano said she wanted UC "to serve as a lodestar, a place that can really set an example." The council also provides guidance on integrating the carbon neutrality initiative and other sustainability goals into UC's teaching, research and public service mission. The council is comprised of scientists, administrators, students and experts from inside and outside UC and will engage the entire university community in its effort to seek out the best practices, policies and technology to achieve carbon neutrality and to advance teaching and research in climate change and sustainability. The GCLC is organized around these key areas: energy services, applicable research, campus and medical center climate action plans, sustainability policy, faculty engagement and education, student engagement, health sciences and

services, financial strategies, and communications and political advocacy. The council is co-chaired by Wendell Brase, UC Irvine's vice chancellor for administrative and business services. Thomas Parham, UCI's vice chancellor for Student Affairs, is a council member, and Abby Reyes, director of UCI's Sustainability Initiative, co-chairs the GCLC Faculty Engagement and Education Working Group. For more information about the GCLC, see:

http://ucop.edu/sustainability/programs-initiatives/global-climate-council/index.html

UC Irvine is represented on all eight Policy Working Groups that report to UC's Sustainability Steering Committee: Waste Reduction and Recycling, Sustainable Foodservice, Green Building, Sustainable Operations, Sustainable Transportation, Sustainable Purchasing, Climate Change, and Sustainable Water Systems.

The website URL where information about cross-campus collaboration is available:

http://ucop.edu/sustainability/about/index.html

Continuing Education

Criteria

Part 1

Institution offers continuing education courses that address sustainability.

Courses that address sustainability include continuing education sustainability courses and continuing education courses that include sustainability. Courses that can be taken for academic credit are not included in this credit. They are covered by the Curriculum subcategory.

Part 2

Institution has at least one sustainability-themed certificate program through its continuing education or extension department.

Degree-granting programs (e.g. programs that confer Baccalaureate, Masters, and Associates degrees) and certificates that are part of academic degree programs are not included in this credit. They are covered in the Curriculum subcategory.

This credit was marked as **Not Pursuing** so Reporting Fields will not be displayed.

Community Service

Criteria

Part 1

Institution engages its student body in community service, as measured by the percentage of students who participate in community service.

Part 2

Institution engages students in community service, as measured by the average hours contributed per full-time student per year.

Institutions may exclude non-credit, continuing education, and/or part-time students from this credit.

This credit was marked as **Not Pursuing** so Reporting Fields will not be displayed.

Community Stakeholder Engagement

Criteria

Institution has adopted a framework for community stakeholder engagement in governance, strategy and operations. The framework includes:

1) Policies and procedures that ensure community stakeholder engagement is applied systematically and regularly across the institution's activities (e.g. planning and development efforts, capital investment projects, and/or other activities and decisions that affect the broader community)

And

2) Established practices to identify and engage relevant community stakeholders, including any vulnerable or underrepresented groups.

Frameworks adopted by entities of which the institution is part (e.g. government or university system) may count for this credit as long as the policies apply to and are followed by the institution.

This credit does not include the engagement of internal campus stakeholders (e.g. students, faculty and staff); internal stakeholder engagement is covered in *PA 3: Governance*.

This credit was marked as **Not Pursuing** so Reporting Fields will not be displayed.

Participation in Public Policy

Criteria

Institution advocates for national, state/provincial, or local public policies that support campus sustainability or that otherwise advance sustainability.

The policy advocacy must be done by the institution, not by students or a student group. This credit acknowledges institutions that advocate for policy changes and legislation to advance sustainability broadly. Advocacy efforts that are made exclusively to advance the institution's interests or projects may not be counted. For example, advocating for government funding for campus sustainability may be counted, whereas lobbying for the institution to receive funds that have already been appropriated may not.

This credit was marked as **Not Pursuing** so Reporting Fields will not be displayed.

Trademark Licensing

Criteria

Institution is a member of the Fair Labor Association (FLA) and/or the Worker Rights Consortium (WRC).

This credit was marked as **Not Pursuing** so Reporting Fields will not be displayed.

Hospital Network

Criteria

Institution’s affiliated hospital or health system is a member of the Global Green and Healthy Hospitals Network, the Healthier Hospitals Initiative and/or Practice Greenhealth.

This credit includes hospitals and health systems that are formally affiliated with a higher education institution (sometimes called “university hospitals”). Other types of health care providers (e.g. insurers through which an institution obtains health care for its employees) are not included.

This credit was marked as **Not Pursuing** so Reporting Fields will not be displayed.

Operations

Air & Climate

This subcategory seeks to recognize institutions that are measuring and reducing their greenhouse gas and air pollutant emissions. Global climate change is having myriad negative impacts throughout the world, including increased frequency and potency of extreme weather events, sea level rise, species extinction, water shortages, declining agricultural production, and spread of diseases. The impacts are particularly pronounced for low-income communities and countries. In addition, institutions that inventory and take steps to reduce their air pollutant emissions can positively impact the health of the campus community, as well as the health of their local communities and regions.

Credit
Greenhouse Gas Emissions
Outdoor Air Quality

Greenhouse Gas Emissions

Responsible Party

Richard Demerjian
Director
Office of Environmental Planning and Sustainability

Criteria

Part 1

Institution has conducted a publicly available greenhouse gas (GHG) emissions inventory that includes, at minimum, Scope 1 and Scope 2 GHG emissions and may also include Scope 3 GHG emissions. The inventory may be validated internally by campus personnel who are independent of the GHG accounting and reporting process and/or verified by an independent, external third party.

Part 2

Institution reduced its adjusted net Scope 1 and Scope 2 GHG emissions per weighted campus user compared to a baseline.

Part 3

Institution's annual adjusted net Scope 1 and Scope 2 GHG emissions are less than the minimum performance threshold of 0.02 metric tons of carbon dioxide equivalent (MtCO2e) per gross square foot (0.002 MtCO2e per gross square metre) of floor area.

Performance for Part 3 of this credit is assessed using EUI-adjusted floor area, a figure that accounts for significant differences in energy use intensity (EUI) between types of building space.

For this credit, the following carbon offsets may be counted:

1. Institution-catalyzed carbon offsets (popularly known as "local offsets")
2. Carbon sequestration due to land that the institution manages specifically for sequestration (as documented in policies, land management plans or the equivalent)
3. Carbon storage from on-site composting
4. Third-party verified purchased carbon offsets

Purchased Renewable Energy Certificates (RECs) that are either Green-e Energy certified or meet Green-e Energy's technical requirements and are verified as such by a third party may be counted as zero emissions energy for purposes of Scope 2 GHG accounting.

Purchased carbon offsets and RECs that have not been third-party verified do not count.

Institutions that have sold or transferred emissions reductions, e.g. in the form of verified emissions reductions (VERs), may not count those reductions toward this credit.

Submission Note:

UC Irvine's Smart Labs Initiative, which safely reduces energy use in laboratories by as much as 60 percent, was recognized with California's highest environmental honor, the Governor's Environmental and Economic Leadership Award, in 2013. The program was

instrumental in UC Irvine being recognized by the U.S. Environmental Protection Agency and partners with a 2014 Climate Leadership Award for Organizational Leadership. Smart Labs also received worldwide recognition at the S-Lab Conference in Liverpool, England, in 2013. The program received the S-Lab award for international laboratory operations.

"---" *indicates that no data was submitted for this field*

Does the institution's GHG emissions inventory include all Scope 1 and Scope 2 GHG emissions?:

Yes

Does the institution's GHG emissions inventory include all Scope 3 GHG emissions from any of the following categories?:

	Yes or No
Business travel	Yes
Commuting	Yes
Purchased goods and services	No
Capital goods	No
Fuel- and energy-related activities not included in Scope 1 or Scope 2	Yes
Waste generated in operations	Yes

Does the institution's GHG emissions inventory include Scope 3 emissions from other categories?:

No

A brief description of the methodology and/or tool used to complete the GHG emissions inventory:

Using the financial control approach to determine organizational boundaries, UCI gathers a comprehensive annual inventory of greenhouse gas emission sources on campus. These data sets are reviewed, analyzed, and publicly reported using the Climate Registry General Reporting Protocol Version 2.0 dated March 2013. The emissions report was independently verified using the Climate Registry General Verification Protocol Version 2.0, dated June 2010.

Has the GHG emissions inventory been validated internally by personnel who are independent of the GHG accounting and reporting process and/or verified by an independent, external third party?:

Yes

A brief description of the internal and/or external verification process:

The University of California, Irvine submits its greenhouse gas emission inventory report to a third party verification party annually. This independent verification process reviews the emission inventory against the Climate Registry's General Reporting Protocol Version 2.0 dated March 2013, following the procedures outlined in the Registry's General Verification Protocol (Version 2.0, June 2010).

Scope 1 and Scope 2 GHG emissions::

	Performance Year	Baseline Year
Scope 1 GHG emissions from stationary combustion	71,093 *Metric Tons of CO2 Equivalent*	33,852 *Metric Tons of CO2 Equivalent*
Scope 1 GHG emissions from other sources	4,346 *Metric Tons of CO2 Equivalent*	0 *Metric Tons of CO2 Equivalent*
Scope 2 GHG emissions from purchased electricity	7,658 *Metric Tons of CO2 Equivalent*	55,275 *Metric Tons of CO2 Equivalent*
Scope 2 GHG emissions from other sources	0 *Metric Tons of CO2 Equivalent*	0 *Metric Tons of CO2 Equivalent*

Figures needed to determine total carbon offsets::

	Performance Year	Baseline Year
Institution-catalyzed carbon offsets generated	6 *Metric Tons of CO2 Equivalent*	0 *Metric Tons of CO2 Equivalent*
Carbon sequestration due to land that the institution manages specifically for sequestration	0 *Metric Tons of CO2 Equivalent*	0 *Metric Tons of CO2 Equivalent*
Carbon storage from on-site composting	221 *Metric Tons of CO2 Equivalent*	0 *Metric Tons of CO2 Equivalent*
Third-party verified carbon offsets purchased	854 *Metric Tons of CO2 Equivalent*	0 *Metric Tons of CO2 Equivalent*

A brief description of the institution-catalyzed carbon offsets program:

The UC Irvine Local Offsets Program focuses on community collaboration and outreach related to energy efficiency, clean and renewable energy, and resulting greenhouse gas emission reductions in the local community. The program pursues projects involving privately owned and non-profit owned residential communities and collaborative projects with local agencies. Resulting carbon emission reductions catalyzed by UCI actions are documented through carbon offset agreements.

As an example, over 20,500 pounds of annual CO2e emission reductions have resulted from a UCI facilitated lighting retrofit project within community facilities owned by a non-profit housing authority.

A brief description of the carbon sequestration program and reporting protocol used:

Building on prior research of the carbon sequestration of trees on campus, a UCI student research project analyzed the potential effectiveness of the campus urban forest for offsetting greenhouse gas emissions based on the Climate Action Reserve's Forest Project Protocol. In addition to an expansive urban forest, UC Irvine also manages four University-owned habitat areas that are permanently protected and provide long term carbon sequestration opportunities. This includes the 202 acre San Joaquin Marsh Reserve, 78 acre Steele/Burnand Anza-Borrego Desert Reserve, 306 acre Burns Pinon Ridge Reserve, and the 135-acre on-campus Ecological Reserve. Future student research projects will analyze the effectiveness of these open space areas for carbon sequestration. Based on the results of both these research projects, UCI will continue to evaluate the adoption of a formal carbon sequestration program.

A brief description of the composting and carbon storage program:

UC Irvine operates an active on-campus composting/carbon storage program for the campus. 50% of all green waste produced on campus is composted and reused on-site.

A brief description of the purchased carbon offsets, including third party verifier(s) and contract timeframes:

Both 2-year and 10-year Green-e certified Renewable Energy Certificates (REC's) were used for the performance year.

Figures needed to determine “Weighted Campus Users”::

	Performance Year	Baseline Year
Number of residential students	13,491	5,833
Number of residential employees	1,426	925
Number of in-patient hospital beds	0	0
Full-time equivalent enrollment	28,602	20,211
Full-time equivalent of employees	7,831	9,681
Full-time equivalent of distance education students	3,000	0

Start and end dates of the performance year and baseline year (or three-year periods):

	Start Date	End Date
Performance Year	Jan. 1, 2013	Dec. 31, 2013
Baseline Year	Jan. 1, 2000	Dec. 31, 2000

A brief description of when and why the GHG emissions baseline was adopted:

The 2007 Climate Action Plan and the UC Policy on Sustainable Practices commits the UC Irvine campus to reduce carbon emissions to 2000 baseline levels by 2014, 1990 baseline levels by 2020, and climate neutrality by 2025.

Gross floor area of building space, performance year:

10,766,160 *Square Feet*

Floor area of energy intensive building space, performance year:

	Floor Area
Laboratory space	2,084,941 *Square Feet*
Healthcare space	157,791 *Square Feet*
Other energy intensive space	690,702 *Square Feet*

Scope 3 GHG emissions, performance year::

	Emissions
Business travel	33,388 *Metric Tons of CO2 Equivalent*
Commuting	23,394 *Metric Tons of CO2 Equivalent*
Purchased goods and services	0 *Metric Tons of CO2 Equivalent*
Capital goods	0 *Metric Tons of CO2 Equivalent*
Fuel- and energy-related activities not included in Scope 1 or Scope 2	0 *Metric Tons of CO2 Equivalent*
Waste generated in operations	354 *Metric Tons of CO2 Equivalent*

Other categories (please specify below)	0 *Metric Tons of CO2 Equivalent*

A brief description of the sources included in Scope 3 GHG emissions from "other categories":

A copy of the most recent GHG emissions inventory:

The website URL where the GHG emissions inventory is posted:

http://rs.acupcc.org/

A brief description of the institution's GHG emissions reduction initiatives, including efforts made during the previous three years:

UC Irvine's carbon reduction program is aligned with the University of California's Policy on Sustainable Practices, which until recently had the following goals:
-- By 2020: Reduce emissions to 1990 levels
-- By 2025: Achieve climate neutrality (Scope 1 & 2)
Under the leadership of UC President Janet Napolitano, the policy was amended in November 2013 and established the year 2025 as the date by which the UC system is to be carbon neutral.

The UC Climate Solutions Steering Group – led by Wendell Brase, vice chancellor for administrative and business services at UC Irvine – created a plan to achieve systemwide carbon reduction: "Prospectus for a Sustainable Future" (November 2011). In it, the group identified "deep energy efficiency," measures that reduce energy consumption and associated carbon emissions by half or more, as the most immediate, cost-feasible strategy to effect a substantial reduction in UC's carbon footprint. This strategy underpins the systemwide plan, which initially targeted these three areas for deep energy savings: lighting, information technology, and laboratories. UC Irvine's comprehensive energy program addresses all three.

In particular, UC Irvine's award-winning Smart Labs Initiative has safely reduced laboratory energy use in new and already energy-efficient retrofitted laboratories by as much as 60 percent. This is a comprehensive program that re-engineers building control systems – ventilation, exhaust and lighting – from top to bottom. Smart Labs uses sensors and software to control lab and building systems (ventilation, HVAC, exhaust, illumination) precisely rather than rely on massive safety margins for ventilation rates, exhaust airspeeds, and other design criteria. This has been what some call a game-changer Laboratories typically account for two-thirds of the energy used by research universities and have an enormous impact on their carbon footprint.

Additionally, the campus has a robust green building program and currently has 11 buildings that have earned a Platinum rating through the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) program and another eight that have achieved a Gold rating.

Finally, UC Irvine has several on-site renewable energy systems. In 2009, 895 kW of photovoltaic panels were installed on 12 roofs. In partnership with the Advanced Power and Energy Program in The Henry Samueli School of Engineering, two 53 kW dual-axis tracking high-concentration photovoltaic solar power generators were installed in 2012.

Currently the campus is installing 11,700 solar panels on the top of three parking structures generating up to 3.2 megawatts of power which will quadruple the amount of solar energy generated on campus.

Outdoor Air Quality

Responsible Party

Richard Demerjian
Director
Office of Environmental Planning and Sustainability

Criteria

Part 1

Institution has adopted policies or guidelines to improve outdoor air quality and minimize air pollutant emissions from mobile sources. Policies and/or guidelines may include, but are not limited to, prohibiting vehicle idling, restrictions on the use of powered lawn care equipment, and other strategies for minimizing mobile emissions.

Policies adopted by entities of which the institution is part (e.g. government or university system) may count for Part 1 of this credit as long as the policies apply to and are followed by the institution.

Part 2

Institution has completed an inventory of significant air emissions from stationary sources on campus. Significant emissions include nitrogen oxides (NO_x), sulfur oxides (SO_x), and other standard categories of air emissions identified in environmental permits held by the institution, international conventions, and/or national laws or regulations.

"---" *indicates that no data was submitted for this field*

Does the institution have policies and/or guidelines in place to improve outdoor air quality and minimize air pollutant emissions from mobile sources?:

Yes

A brief description of the policies and/or guidelines to improve outdoor air quality and minimize air pollutant emissions from mobile sources:

Clean Air Program:
UC Irvine's Environmental Health and Safety Air Quality Program assists the campus in air pollution prevention and provides compliance assistance on South Coast air Quality Management District (SCAQMD) and other Clean Air Act laws and regulations.

Diesel Powered Equipment Idling Policy:
No diesel engine or diesel powered equipment shall be idled on UCI property or by UCI personnel or an agent of UCI for more that five (5) minutes unless one or more of the following conditions exist:
1.idling required when queuing,
2.idling to verify the vehicle or equipment is in safe operating condition,
3.idling to provide services in the event of an emergency specifically for protection of human health, safety, or the environment,
4.idling required for engine or equipment testing, servicing, repairing, or diagnostics,

5.idling to accomplish work for which the vehicle or equipment was designed (lifting,power generation, mixing, pumping, etc.),
6.idling required to bring the diesel powered system to a predetermined minimum operating temperature per manufacturers requirements, or
7.idling to ensure the health and safety of the equipment operator.

Has the institution completed an inventory of significant air emissions from stationary sources on campus?:

Yes

A brief description of the methodology(ies) the institution used to complete its air emissions inventory:

The methods used to complete the air emissions inventory include:
1. Continuous monitoring to measure actual emissions;
2. Extrapolating the results from source emissions tests;
3. Combining published emission factors with known activity levels;
4. And using emission factor to estimate emissions when actual emission data is not available.

Weight of the following categories of air emissions from stationary sources::

	Weight of Emissions
Nitrogen oxides (NOx)	12.64 *Tons*
Sulfur oxides (SOx)	0.14 *Tons*
Carbon monoxide (CO)	7 *Tons*
Particulate matter (PM)	9.46 *Tons*
Ozone (O3)	---
Lead (Pb)	---
Hazardous air pollutants (HAPs)	1.58 *Tons*
Ozone-depleting compounds (ODCs)	0.96 *Tons*
Other standard categories of air emissions identified in permits and/or regulations	---

A brief description of the institution's initiatives to minimize air pollutant emissions from stationary sources, including efforts made during the previous three years:

By removing small boilers in three buildings from regular service and using the high-temperature water system instead, UC Irvine has eliminated the use of a significant amount of natural gas and associated pollutants.

The website URL where information about the institution's outdoor air quality policies, guidelines or inventory is available:

http://www.ehs.uci.edu/programs/enviro/cleanairprog.html

Buildings

This subcategory seeks to recognize institutions that are taking steps to improve the sustainability performance of their buildings. Buildings are generally the largest user of energy and the largest source of greenhouse gas emissions on campuses. Buildings also use significant amounts of potable water. Institutions can design, build, and maintain buildings in ways that provide a safe and healthy indoor environment for inhabitants while simultaneously mitigating the building's impact on the outdoor environment.

Credit
Building Operations and Maintenance
Building Design and Construction
Indoor Air Quality

Building Operations and Maintenance

Responsible Party

Richard Demerjian
Director
Office of Environmental Planning and Sustainability

Criteria

Institution owns and operates buildings that are:

1) Certified under a green building rating system for existing buildings, e.g. LEED® for Existing Buildings: Operations & Maintenance (O&M)

And/or

2) Operated and maintained in accordance with formally adopted sustainable operations and maintenance guidelines and policies that cover all of the following:

- Impacts on the surrounding site
- Energy consumption
- Building-level energy metering
- Usage of environmentally preferable materials
- Indoor environmental quality
- Water consumption
- Building-level water metering

Building space that meets multiple criteria listed above should not be double-counted.

Submission Note:

The Sustainable Building Operations & Maintenance Program establishes goals for the management and monitoring of building energy use, water efficiency, purchasing of environmentally preferable materials, integrated pest management, and indoor environmental air quality.

"---" *indicates that no data was submitted for this field*

Does the institution have any building space certified under the following green building rating systems for existing buildings?:

	Yes or No

LEED for Existing Buildings or another 4-tier rating system used by an Established Green Building Council (GBC)	Yes
The DGNB system, Green Star Performance, or another 3-tier GBC rating system	No
BREEAM-In Use, CASBEE for Existing Building, or another 5-tier GBC rating system	No
Other non-GBC rating systems (e.g. BOMA BESt, Green Globes)	No

A brief description of the green building rating system(s) used and/or a list or sample of certified buildings and ratings:

UC Irvine has registered seven buildings within the US Green Building Council LEED EB:OM program with the Croul Hall Building achieving certification at LEED EB:OM Silver level. The remaining six registered buildings: Natural Sciences II, Gillespie Hall, Hewitt Hall, Social Ecology I, Reines Hall, and Humanities Instructional Building are proceeding through the LEED documentation and certification process.

Total floor area of eligible building space (operations and maintenance):

10,766,160 *Square Feet*

Floor area of building space that is certified at each level under a 4-tier rating system for existing buildings used by an Established Green Building Council::

	Certified Floor Area
Minimum Level (e.g. LEED Certified)	0 *Square Feet*
3rd Highest Level (e.g. LEED Silver)	66,170 *Square Feet*
2nd Highest Level (e.g. LEED Gold)	0 *Square Feet*
Highest Achievable Level (e.g. LEED Platinum)	0 *Square Feet*

Floor area of building space that is certified at each level under a 3-tier rating system for existing buildings used by an Established Green Building Council::

	Certified Floor Area

Minimum Level	---
Mid-Level	---
Highest Achievable Level	---

Floor area of building space that is certified at each level under a 5-tier rating system for existing buildings used by an Established Green Building Council::

	Certified Floor Area
Minimum Level	---
4th Highest Level	---
Mid-Level	---
2nd Highest Level	---
Highest Achievable Level	---

Floor area of building space that is certified at any level under other green building rating systems for existing buildings:

Floor area of building space that is maintained in accordance with formally adopted sustainable building operations and maintenance guidelines or policies, but NOT certified:

10,699,990 *Square Feet*

A copy of the sustainable building operations and maintenance guidelines or policies:

UC-CR-13-0213_SustainablePractice.pdf

The date the guidelines or policies were formally adopted:

July 1, 2004

A brief description of the sustainable building operations and maintenance program and/or a list or sample of buildings covered:

In addition to pursuing LEED EB:OM certification of specific existing campus buildings, UC Irvine has adopted a Sustainable Operations and Maintenance Program that seeks to achieve optimal building energy performance, sustainable building operations, and a healthy building environment for existing buildings campuswide. This approach to building operations and maintenance was adopted

campus-wide in 2013 through the Sustainable Building Operations & Maintenance Program. This program has set goals to conserve water and energy, reduce or eliminate waste, promote healthy indoor air quality, and support the purchasing of environmentally preferable materials and supplies. The following practices are being implemented in support of these goals:

1. All facilities will be managed and monitored with an emphasis on deep energy efficiency consistent with UC Policy and UC Irvine's Energy management programs (

http://www.fm.uci.edu/units/utils_energy.html

). This includes the goal of exceeding UC policy of 20% reduction in energy use in all buildings through efficiency and conservation programs. Building level metering and sub-metering will be installed and monitored on all campus buildings where financially viable.

2. All facilities will be managed and monitored with a goal of deep water efficiency consistent with UC Sustainability Policy and UC Irvine Water Action Plan (

www.sustainability.uci.edu

) to exceed UC Policy of 20% water savings and achieve UC Irvine's stretch goal of 30% water savings from 2005-2007 baseline condition. Building level water metering and sub-metering shall be installed in all facilities where financially feasible to provide detailed use data.

3. Environmentally preferable materials, including cleaning, maintenance, and painting and coating supplies, shall be purchased and used in all building operations and maintenance to protect the health of building occupants and the surrounding environment. Products meeting Green Seal, Environmental Choice or similar approved third-party certification shall be used.

4. All indoor pest control shall adhere to UC Irvine's Integrated Pest Management (IPM) Program (

http://www.fm.uci.edu/units/pest_mgt.html

) to protect the health of building occupants, the surrounding environment, and ensure that least toxic materials are applied.

5. The indoor environmental quality of campus buildings shall be managed in conformance with EH&S Clean Air Program

http://www.policies.uci.edu/adm/pols/903-10.html

to ensure the health and safety of building occupants.

In 2012 UC Irvine completed the certification of a LEED EB:OM Master Site which awarded points on a campus wide basis for Integrated Pest Management, Erosion Control, and Landscape Management Plan (SSc.3) , Site Development- Protect or Restore Open Habitat (SSc.5), Water Efficient Landscaping (WEc.3), and Green Cleaning - Indoor Integrated Pest Management (IEQc. 3.6).

Achieving LEED Silver certification in 2012, Croul Hall exemplifies sustainable building operations and maintenance at UC Irvine. Home to the Department of Earth System Science Croul Hall features efficient plumbing fixtures, efficient landscape irrigation, energy monitoring and improved indoor air quality. Ongoing operations of the building include sustainable purchasing of ongoing consumables, durable goods, and green cleaning products as well as the implementation of green cleaning practices and solid waste management.

A brief description of how the institution ensures compliance with sustainable building operation and maintenance guidelines and policies:

UC Irvine's performance with respect to sustainable building operation and maintenance is measured against metrics established by the campus as well as those delineated in the University of California's Sustainable Practices Policy, originally issued in July 2004 and most recently updated in November 2013. The policy establishes goals, metrics, policies, and procedures in eight areas of sustainable practices: green building, clean energy, sustainable transportation, climate protection, sustainable operations, waste reduction and recycling, environmentally preferable purchasing, and sustainable food service. Compliance with these policies and procedures is ensured through annual tracking and reporting of adopted metrics.

The website URL where information about the institution's certified buildings and/or sustainable operations and maintenance guidelines or policies is available:

http://policy.ucop.edu/doc/3100155/Sustainable%20Practices

Building Design and Construction

Responsible Party

Richard Demerjian
Director
Office of Environmental Planning and Sustainability

Criteria

Institution-owned buildings that were constructed or underwent major renovations in the previous five years are:

1) Certified under a green building rating system for new construction and major renovations (e.g. the LEED® for New Construction and Major Renovations, LEED for Commercial Interiors, LEED for Healthcare, and/or LEED for Core and Shell Green Building Rating Systems)

2) Certified Living under the Living Building Challenge (LBC)

And/or

3) Designed and built in accordance with formally adopted green building guidelines and policies that cover all of the following topics:

- Impacts on the surrounding site
- Energy consumption
- Building-level energy metering
- Usage of environmentally preferable materials
- Indoor environmental quality
- Water consumption
- Building-level water metering

Building space that meets multiple criteria listed above should not be double-counted.

Submission Note:

UC Irvine is a national leader in green building design and implementation with 13 LEED NC Platinum Buildings and 8 LEED NC Gold Buildings currently on campus totaling more than 2,920,981 gross square feet of building space. UCI worked collaboratively with the US Green Building Council over the last decade to develop a campuswide systems approach to green building certification and that general model has contributed to the successful certification of this large portfolio of green buildings.

"---" *indicates that no data was submitted for this field*

Does the institution have any building space certified under the following green building rating systems for new construction and major renovations?:

	Yes or No

LEED or another 4-tier rating system used by an Established Green Building Council (GBC)	Yes
The DGNB system, Green Star, or another 3-tier GBC rating system	No
BREEAM, CASBEE, or another 5-tier GBC rating system	No
The Living Building Challenge	No
Other non-GBC rating systems (e.g. BOMA BESt, Green Globes)	No

A brief description of the green building rating system(s) used and/or a list of certified buildings and ratings:

UC Irvine participates in the Leadership in Energy and Environmental Design (LEED) certification program of the U.S. Green Building Council. The following buildings have been certified between 2007 and 2015:

LEED PLATINUM (New Construction)
1. Alumni Center (2015)
2. Contemporary Arts Center (2014)
3. Social & Behavioral Sciences Gateway (2013)
4. Biological Sciences III (2013)
5. Verano Place Infant Toddler Center (2013)
6. Verano Place student housing complex – Cedar Unit (2013)
7. Verano Place student housing complex – Aspen unit (2013)
8. Verano Place student housing complex – Poplar unit (2013)
9. Verano Place student housing complex – Alder unit (2013)
10. Engineering Hall (2012)
11. Medical Education Building (2012)
12. Sue & Bill Gross Hall – A CIRM Institute (2011)
13. Humanities Gateway (2011)

LEED GOLD (New Construction)
1. Clinical Laboratory Building at UC Irvine Medical Center (2011)
2. Puerta del Sol student housing complex* (2011)
3. Camino del Sol student housing complex* (2011)
4. Anteater Recreation Center expansion (2009)
5. Donald Bren Hall (2009)
6. Student Center expansion (2009)
7. Anteater Instruction and Research Building (2008)
8. Palo Verde student housing complex expansion (2007)

* Privately owned and managed by American Campus Communities (not included in eligible building space but built to LEED specifications in accordance with campus requirements)

Total floor area of eligible building space (design and construction):

1,361,843 *Square Feet*

Floor area of building space that is certified at each level under a 4-tier rating system for new construction and major renovations used by an Established Green Building Council::

	Certified Floor Area
Minimum Level (e.g. LEED Certified)	0 *Square Feet*
3rd Highest Level (e.g. LEED Silver)	0 *Square Feet*
2nd Highest Level (e.g. LEED Gold)	380,313 *Square Feet*
Highest Achievable Level (e.g. LEED Platinum)	981,530 *Square Feet*

Floor area of building space that is certified at each level under a 3-tier rating system for new construction and major renovations used by an Established Green Building Council::

	Certified Floor Area
Minimum Level	---
Mid-Level	---
Highest Achievable Level	---

Floor area of building space that is certified at each level under a 5-tier rating system for new construction and major renovations used by an Established Green Building Council::

	Certified Floor Area
Minimum Level	---
4th Highest Level	---
Mid-Level	---
2nd Highest Level	---

Highest Achievable Level	---

Floor area of building space certified Living under the Living Building Challenge:

Floor area of building space that is certified at any level under other green building rating systems for new construction and major renovations:

Floor area of building space that was designed and constructed in accordance with green building policies or guidelines but NOT certified:

A copy of the guidelines or policies :

UC-CR-13-0213_SustainablePractice.pdf

The date the guidelines or policies were adopted:

July 1, 2004

A brief description of the green building guidelines or policies and/or a list or sample of buildings covered:

Green building at UC Irvine is guided by the UC Sustainable Practices Policy. The Policy requires new building projects to achieve a minimum of LEED 'Silver' certification through the USGBC LEED program. All UC Irvine buildings completed within the scope of this policy have well exceeded these requirements with the most recent eleven buildings completed achieving LEED 'Platinum' certification.

A brief description of how the institution ensures compliance with green building design and construction guidelines and policies:

UC Irvine uses a systems approach to green building design which involves a partnership and collaboration between the UCI Offices of Design and Construction Services, Environmental Planning & Sustainability, and the project design/build team. Green building guidelines, policies and objectives are identified at project inception and tracked throughout project implementation and certification by the project team.

The website URL where information about the institution's certified buildings and/or green building design and construction guidelines or policies is available:

http://policy.ucop.edu/doc/3100155/Sustainable%20Practices

Indoor Air Quality

Responsible Party

Matt Gudorf
Campus Energy Manager
Facilities Management

Criteria

Institution has an indoor air quality (IAQ) management program that includes regular auditing or monitoring, a mechanism for occupants to register complaints, and action plans to implement any corrective measures required in response to audits, monitoring or complaints.

Policies and plans adopted by entities of which the institution is part (e.g. government or university system) may count for this credit as long as the policies apply to and are followed by the institution.

"---" *indicates that no data was submitted for this field*

Floor area of building space covered by an indoor air quality (IAQ) management program that meets the criteria for this credit:

5,826,553 *Square Feet*

Gross floor area of building space:

5,826,553 *Square Feet*

A brief description of the institution's indoor air quality program(s):

All maintained buildings are equipped with MERV 14 filters. Regular monitoring of filter performance is provided by a third-party contract service and includes visual inspection, and pressure drop readings.

Complaints regarding indoor air quality are reported to the Facilities Management Service Desk. There they are electronically logged and archived. Facilities Management HVAC staff investigate and correct issues as they come up. 337,510 square feet are monitored for real-time IAQ with ventilation adjustment for TVOC, Particles, CO2, CO, humidity, and temperature using the Aircuity Optinet system.

An additional 36,000 square feet of the new Business Unit 2 building makes use of the Aircuity Optinet system for CO2 monitoring, optimizing the fresh air intake economizer and saving energy.

The website URL where information about the institution's indoor air quality program(s) is available:

Dining Services

This subcategory seeks to recognize institutions that are supporting a sustainable food system. Modern industrial food production often has deleterious environmental and social impacts. Pesticides and fertilizers used in agriculture can contaminate ground and surface water and soil, which can in turn have potentially dangerous impacts on wildlife and human health. The production of animal-derived foods often subjects animals to inhumane treatment and animal products have a higher per-calorie environmental intensity than plant-based foods. Additionally, farm workers are often directly exposed to dangerous pesticides, subjected to harsh working conditions, and paid substandard wages. Furthermore, food is often transported long distance to institutions, producing greenhouse gas emissions and other pollution, as well as undermining the resiliency of local communities.

Institutions can use their purchasing power to require transparency from their distributors and find out where the food comes from, how it was produced, and how far it traveled. Institutions can use their food purchases to support their local economies; encourage safe, environmentally-friendly and humane farming methods; and help eliminate unsafe working conditions and alleviate poverty for farmers. These actions help reduce environmental impacts, preserve regional farmland, improve local food security, and support fair and resilient food systems.

Please note that while dining services can also play an important role in conserving energy and water, reducing waste, and purchasing environmentally preferable materials other than food, STARS measures these impacts across the institution instead of by department; therefore, the benefits of these actions are captured in the Energy, Water, Waste, and Purchasing subcategories, respectively.

Credit
Food and Beverage Purchasing
Low Impact Dining

Food and Beverage Purchasing

Responsible Party

Jack McManus
Director
UCI Hospitality and Dining

Criteria

Part 1

Institution's dining services purchase food and beverages that meet at least one of the following criteria:

• Local and community-based

And/or

• Third party verified to be ecologically sound, fair and/or humane

Food and beverage purchases that meet both criteria listed above (e.g. local community-based products that are Certified Organic) should not be double-counted.

Local community- based products:

- Are sourced from local community-based producers (directly or through distributors)
- Contain raw ingredients (excluding water) that are third party verified and/or locally harvested and produced (e.g. bread made with Organic flour or local honey) and
- Exclude products from Concentrated Animal Feeding Operations (CAFOs), products that have minimal nutritional value (e.g. soda, chewing gum, candies made predominantly from sweeteners), and products from producers that have been convicted of one or more labor law violations within the previous three years

Products that are not local and community-based must be third party verified to count. Recognized third party standards and certifications for food and beverages are outlined in the STARS Technical Manual. Institutions located outside the U.S. and Canada may use additional third party certifications to identify ecologically sound, fair and humane products, provided the certifications are reported in "Notes about this submission".

Part 1 of this credit includes food and beverage purchases for on-campus dining operations and catering services operated by the institution or the institution's primary dining services contractor (e.g. Aramark, Bon Appétit Management Company, Chartwells, Sodexo). On-site franchises, convenience stores, vending services, and concessions are excluded from Part 1.

Part 2

Institution's on-site franchises, convenience stores, vending services, and/or concessions purchase food and beverages that are third party verified and/or locally sourced (i.e. meet the criteria outlined in Part 1).

Submission Note:

The calculations include all residential dining commons, catering, concessions and 23 retail dining locations but do not include Anthill Pub & Grill, the University Club, Wendy's and Cafe Espresso. The locations included are operated by the campus's primary food service contractor. Locations not included include sub-contracted and independently operated locations.

"---" *indicates that no data was submitted for this field*

Percentage of dining services food and beverage expenditures that are local and community-based and/or third party verified:

21.16

A copy of an inventory, list or sample of sustainable food and beverage purchases:

UCI AASHE Local Items Sample.docx

An inventory, list or sample of sustainable food and beverage purchases:

See attachment/upload.

Does the institution wish to pursue Part 2 of this credit (food and beverage expenditures for on-site franchises, convenience stores, vending services, or concessions)?:

Yes

Percentage of on-site franchise, convenience store, vending services, and concessions food and beverage purchases that are local and community-based and/or third party verified:

22.95

A copy of an inventory, list or sample of on-site franchise, convenience store, vending machine, and/or concessions food and beverage purchases that are sustainably produced:

An inventory, list or sample of on-site franchise, convenience store, vending machine, and/or concessions food and beverage purchases that are sustainably produced:

List/Sample:
Rainforest French Roast
Regular Iced Coffee Rainforest Alliance
Bewleys Fair Trade Chai
Hot Tea Fair Trade Earl Grey
Hot Tea Fair Trade Chinese Green
Hot Tea Fair Trade English Breakfast
Hot Tea Chamomile Fair Trade Organic
Hot Tea Chai Fairtrade
Hot Tea Lemon Zest Organic
Papua New Guinea Oasis Rainforest Alliance
Espresso Valeroso Fair Trade Organic

Fair Trade Vanilla Bean
Organic Decaf Corazon Fair Trade Certified
Fair Trade Vanilla
Rainforest Hazelnut
Fair Trade Tropical White
Organic Colombia Del Alma Rainforest Certified
Honduras las Capucas Organic, Fairtrade

A brief description of the sustainable food and beverage purchasing program:

1. UCI Hospitality and Dining/Aramark engage produce vendors proactively to source local foods from within 250 miles of campus. Our produce vendor, Freshpoint Produce Company, sends a “Hot Sheet” weekly that indicates what produce is locally sourced. UCI then works this into its menu mix where appropriate.
2. UC Irvine includes a minimum amount of certified organic items on its residential dining salad bar.
3. Organic Greens To Go, a retail dining location on campus, features made-to-order items where the majority of the menu selections are certified organic.
4. All seafood purchases must meet the Monterey Bay Aquarium Guidelines for Sustainable Seafood.
5. All coffee products purchased for residential dining and Java City Coffee locations are Fair Trade, Rainforest Alliance certified, organic or a combination of two or more of these categories.
6. All eggs served on campus are cage-free.

A brief description of the methodology used to track/inventory sustainable food and beverage purchases:

All food purchases are totaled from invoices for our dining locations. Separately, sustainable purchases as defined by AASHE STARS 2.0 are totaled for the dining locations. These purchases meet one or more criteria and are either labeled as such on the invoices or confirmed as such by our suppliers. The lists of third party verified and local and community based foods are cross-referenced to prevent double-counting.

Total annual food and beverage expenditures:

7,456,981 *US/Canadian $*

Which of the following food service providers are present on campus and included in the total food and beverage expenditure figures?:

	Present?	Included?
Dining operations and catering services operated by the institution	Yes	No
Dining operations and catering services operated by a contractor	Yes	Yes
Franchises	Yes	Yes

Convenience stores	Yes	Yes
Vending services	Yes	---
Concessions	Yes	Yes

Has the institution achieved the following?:

	Yes or No
Fair Trade Campus, College or University status	No
Certification under the Green Seal Standard for Restaurants and Food Services (GS-46)	No
Marine Stewardship Council (MSC) certification	No
Signatory of the Real Food Campus Commitment (U.S.)	No

A brief description of other sustainable restaurant and food service standards that the institution's dining services operations are certified under:

The website URL where information about the institution's sustainable food and beverage purchasing efforts is available:

http://uci.campusdish.com/Sustainability/WhatWeAreDoing.aspx

Low Impact Dining

Responsible Party

Jack McManus
Director
UCI Hospitality and Dining

Criteria

Part 1

Conventionally produced animal products comprise less than 30 percent of the institution's total dining services food purchases.

Conventionally produced animal products include all food products that contain animal derived (i.e. meat, fish, egg, dairy) ingredients that have not been verified to be sustainably produced. Sustainably produced animal products have been either:

- Third party verified to be ecologically sound and/or humane (see *OP 6: Food and Beverage Purchasing*)

  Or

- Verified by the institution to be both ecologically sound and humane (e.g. "Pasture Raised", "Grass Fed" or "Humanely Raised") through a relationship with a local producer

Part 2

Institution:

- Offers diverse, complete-protein vegan options at all meals in at least one dining facility on campus

  And

- Provides labels and/or signage that distinguishes between vegan, vegetarian (not vegan), and other items

This credit includes on-campus dining operations and catering services operated by the institution or the institution's primary dining services contractor. On-site franchises, convenience stores, vending machines, and concessions should be excluded to the extent feasible.

"---" *indicates that no data was submitted for this field*

Percentage of total dining services food purchases comprised of conventionally produced animal products:

33.17

A brief description of the methodology used to track/inventory expenditures on animal products:

Annual food purchases are tracked automatically. Non-animal food purchases and sustainable animal-derived food purchases are totaled individually from invoices for the dining locations on campus.

Does the institution offer diverse, complete-protein vegan dining options at all meals in at least one dining facility on campus?:

Yes

Does the institution provide labels and/or signage that distinguishes between vegan, vegetarian (not vegan), and other items?:

Yes

Are the vegan options accessible to all members of the campus community?:

Yes

A brief description of the vegan dining program, including availability, sample menus, signage and any promotional activities (e.g. "Meatless Mondays"):

Vegan entrees are available at every meal in all residential dining commons and most retail locations. All campus dining locations are open to all students as well as staff, faculty and off-campus visitors. In addition, a comprehensive line of "grab and go" vegan entrees and other food products are available in campus convenience stores. UCI Hospitality & Dining provides a Guide to Vegan & Vegetarian Guide to Eating on Campus, which highlights vegan and vegetarian foods (separately) for both residential and retail dining locations. In addition, the residential dining commons feature menus and other signs that specifically highlight vegan and vegetarian foods and feature special Meatless Monday identifiers every Monday that highlight meatless dishes. UCI Hospitality & Dining also holds a variety of promotional activities to support Meatless Monday, Vegetarian Awareness Month and World Vegan Month. UCI Hospitality & Dining also coordinates events with Irvine Students Against Animal Cruelty (ISAAC) and Real Food Challenge at UCI to educate students about vegan dining and nutrition and to help the clubs promote their presence. Events include cooking demonstrations, educational games, sampling days and healthy and meatless eating pledges.

A brief description of other efforts the institution has made to reduce the impact of its animal-derived food purchases:

In addition to serving only cage-free eggs and Monterey Bay Aquarium 'Best Choices' and 'Good Alternatives' for seafood, UCI Hospitality & Dining also provides local chicken and other meats and local dairy. Jamba Juice at UCI also uses American Humane Certified yogurt. UCI Hospitality & Dining features prominent Watermark identifiers at every station in the residential dining commons to categorize the foods with a Low, Moderate or High Watermark (0-50/51-149/150+ gallons to produce). These identifiers give students the opportunity to make informed choices when dining to reduce the impact of their foods, as many of the High Watermark foods are animal-derived.

The website URL where information about where information about the vegan dining program is available:

http://uci.campusdish.com/Sustainability/WhatWeAreDoing.aspx

Annual dining services expenditures on food:

5,550,918 *US/Canadian $*

Annual dining services expenditures on conventionally produced animal products:

1,841,381.34 *US/Canadian $*

Annual dining services expenditures on sustainably produced animal products:

511,320.19 *US/Canadian $*

Energy

This subcategory seeks to recognize institutions that are reducing their energy consumption through conservation and efficiency, and switching to cleaner and renewable sources of energy such as solar, wind, geothermal, and low-impact hydropower. For most institutions, energy consumption is the largest source of greenhouse gas emissions, which cause global climate change. Global climate change is having myriad negative impacts throughout the world, including increased frequency and potency of extreme weather events, sea level rise, species extinction, water shortages, declining agricultural production, ocean acidification, and spread of diseases. The impacts are particularly pronounced for vulnerable and poor communities and countries. In addition to causing global climate change, energy generation from fossil fuels, especially coal, produces air pollutants such as sulfur dioxide, nitrogen oxides, mercury, dioxins, arsenic, cadmium and lead. These pollutants contribute to acid rain as well as health problems such as heart and respiratory diseases and cancer. Coal mining and oil and gas drilling can also damage environmentally and/or culturally significant ecosystems. Nuclear power creates highly toxic and long-lasting radioactive waste. Large-scale hydropower projects flood habitats and disrupt fish migration and can involve the relocation of entire communities.

Implementing conservation measures and switching to renewable sources of energy can help institutions save money and protect them from utility rate volatility. Renewable energy may be generated locally and allow campuses to support local economic development. Furthermore, institutions can help shape markets by creating demand for cleaner, renewable sources of energy.

Credit
Building Energy Consumption
Clean and Renewable Energy

Building Energy Consumption

Responsible Party

Matt Gudorf
Campus Energy Manager
Facilities Management

Criteria

Part 1

Institution has reduced its total building energy consumption per gross square foot/metre of floor area compared to a baseline.

Part 2

Institution's annual building energy consumption is less than the minimum performance threshold of 28 Btu per gross square foot (2.6 Btu per gross square metre) of floor area per degree day.

Performance for Part 2 of this credit is assessed using EUI-adjusted floor area, a figure that accounts for significant differences in energy use intensity (EUI) between types of building space.

Submission Note:

UC Irvine has received national and international recognition for its energy management and energy conservation programs and its outreach and engagement to peer institutions with the global community to further deep energy efficiency and climate protection goals. This includes UC Irvine's leadership in the US Better Buildings Challenge program, recognition by US EPA with a national Climate Leadership Award for its outreach and engagement in energy conservation, and international recognition of UCI's SmartLabs energy initiative.

"---" *indicates that no data was submitted for this field*

Total building energy consumption, all sources (transportation fuels excluded):

	Performance Year	Baseline Year
Total building energy consumption	1,381,364 *MMBtu*	1,983,028 *MMBtu*

Purchased electricity and steam:

	Performance Year	Baseline Year
Grid-purchased electricity	64,422 *MMBtu*	153,513 *MMBtu*

District steam/hot water	0 *MMBtu*	0 *MMBtu*

Gross floor area of building space::

	Performance Year	Baseline Year
Gross floor area	10,349,784 *Gross Square Feet*	8,827,965 *Gross Square Feet*

Floor area of energy intensive space, performance year::

	Floor Area
Laboratory space	2,084,941 *Square Feet*
Healthcare space	157,791 *Square Feet*
Other energy intensive space	

Degree days, performance year (base 65 °F / 18 °C)::

	Degree Days
Heating degree days	808
Cooling degree days	1,959

Source-site ratios::

	Source-Site Ratio (1.0 - 5.0; see help icon above)
Grid-purchased electricity	3.14
District steam/hot water	1.20

Start and end dates of the performance year and baseline year (or 3-year periods)::

	Start Date	End Date
Performance Year	Jan. 1, 2014	Dec. 31, 2014

Baseline Year	Jan. 1, 2008	Dec. 31, 2008

A brief description of when and why the building energy consumption baseline was adopted:

The university installed a combined heat and power plant in 2007. This installation drastically changed the energy delivered to the campus,from predominantly grid delivered electricity to predominantly natural gas delivery.

A brief description of any building temperature standards employed by the institution:

UC Irvine uses a networked campus-wide building energy management system. Some buildings have Siemens' Apogee® and Johnson Controls' Metasys® systems, while laboratory buildings utilize Phoenix Controls lab air control systems. Space scheduling and run times are continually updated and evaluated by the energy management system shop according to class and event schedules. In addition to these systems Aircuity's Optinet system is deployed in 11 lab buildings allowing for both indoor air quality control of air change rates as well as occupancy based control.

A brief description of any light emitting diode (LED) lighting employed by the institution:

UC Irvine has installed LED lighting throughout the campus. Campus parking lots are bi-level LED. Exterior building wall packs, can lights, landscape lighting, canopy fixtures, step lights, and pathway lighting have received LED upgrades. Campus high bay and warehouse spaces have been retrofitted with LED fixtures with occupancy sensors built into each fixture.

A brief description of any occupancy and/or vacancy sensors employed by the institution:

UC Irvine makes use of occupancy sensors: both wall and ceiling mount. The choice between single technology and dual technology is space driven due to layout, and the selection is made on a case-by-case basis at the time of installation. UC Irvine has installed bi-level lighting in stairwells throughout campus in addition to extensive recircuiting, allowing for a policy of auto on to 50% manual on to 100% and auto off. Daylighting technology is installed within 15 feet of the window line for buildings constructed within the last three years. Lighting control systems are also used for parking structures, allowing perimeter fixtures to be turned off during daylight hours. All parking structure lighting has been retrofitted to 70W/35W occupancy-based induction lighting.

A brief description of any passive solar heating employed by the institution:

The majority of campus buildings are designed to take advantage of our Southern California climate. The walls of our newest buildings are 12+ inches thick concrete with no interior finish. The unfinished concrete walls are designed to absorb heat during the day and radiate it to the space at night, and then at night absorb the cool night air and radiate it to the space during the day. Passive solar heating and cooling dramatically decreases the need for mechanical heating and cooling in our buildings.

A brief description of any ground-source heat pumps employed by the institution:

UC Irvine has explored the ground-source heat pump however the climate that UC Irvine operates in does not support the cost of installation.

A brief description of any cogeneration technologies employed by the institution:

Since mid-2007, the campus has operated a combustion turbine generating plant at its award-winning central heating and cooling plant, which provides greater than 95 percent of the heating and cooling to the core campus facilities. The cogeneration facility uses a Solar Turbines Titan combustion turbine with an available steam turbine for additional energy recovery. Emissions are tightly controlled with NOx emissions below 2 ppm by volume. The generating plant provides 81.8% of the electricity used by the campus and the heat recovery steam generator displaces more than 485,000 MMBtu of natural gas that would otherwise have been burned in conventional boilers.

A brief description of any building recommissioning or retrofit program employed by the institution:

UCI has completed MBCx for thirteen buildings in the past three years. As part of the program we will install energy monitoring and metering equipment in the buildings as needed. In order to identify energy savings opportunities we need to monitor the energy used. MBCx is a systematic process for optimizing an existing building’s performance by identifying operational deficiencies and making necessary adjustments to correct the system. Emphasis is on whole building metering, database analysis and storage of energy records, and long term monitoring of projects. At the current time we are recommissioning the central plant.

A brief description of any energy metering and management systems employed by the institution:

UC Irvine uses a networked campus-wide building energy management system. Some buildings use Siemens’ Apogee® and Johnson Controls’ Metasys® systems, while the laboratory building utilize Phoenix Controls lab air control systems. Space scheduling and run times are continually updated and evaluated by the EMS shop according to class and event schedules. In addition to these systems, Aircuity’s Optinet system is deployed in 11 lab buildings allowing for both indoor air quality control of air change rates as well as occupancy based control.

A brief description of the institution's program to replace energy-consuming appliances, equipment and systems with high efficiency alternatives:

UC Irvine has a purchasing policy in place that requires appliances or equipment being purchased to be Energy Star listed. In addition UCI has an ongoing effort to find and replace inefficient ultra low temp freezers with the most efficient cold storage currently on the market.

A brief description of any energy-efficient landscape design initiatives employed by the institution:

The university waters 95% of the irrigated landscape of the campus with reclaimed (non-potable) water. The university also has many buildings with drought tolerant landscaping that is designed to reduce run off and heat island effect.

A brief description of any vending machine sensors, lightless machines, or LED-lit machines employed by the institution:

VendingMiser® uses a passive infrared sensor to power down the machine when the surrounding area is vacant, monitor the room's temperature, and automatically repower the cooling system at one- to three-hour intervals, independent of sales, ensuring the product stays cold.

A brief description of other energy conservation and efficiency initiatives employed by the institution:

UC Irvine's aggressive energy management program focuses on reducing energy waste by implementing best practices and harnessing emerging technologies. UC Irvine is has implemented it's Smart Labs program reducing lab energy consumption by 50% or more in 13 lab buildings and continues to complete energy reduction projects, across the campus.

The website URL where information about the institution's energy conservation and efficiency initiatives is available:

http://www.ehs.uci.edu/programs/energy/index.html

Clean and Renewable Energy

Responsible Party

Matt Gudorf
Campus Energy Manager
Facilities Management

Criteria

Institution supports the development and use of clean and renewable energy sources, using any one or combination of the following options.

Option 1:	Generating electricity from clean and renewable energy sources on campus and retaining or retiring the rights to the environmental attributes of such electricity. (In other words, if the institution has sold Renewable Energy Credits for the clean and renewable energy it generated, it may not claim such energy here.) The on-site renewable energy generating devices may be owned and/or maintained by another party as long as the institution has contractual rights to the associated environmental attributes.
Option 2:	Using renewable sources for non-electric, on-site energy generation, such as biomass for heating.
Option 3:	Catalyzing the development of off-site clean and renewable energy sources (e.g. an off-campus wind farm that was designed and built to supply electricity to the institution) and retaining the environmental attributes of that energy.
Option 4:	Purchasing the environmental attributes of electricity in the form of Renewable Energy Certificates (RECs) or other similar renewable energy products that are either Green-e Energy certified or meet Green-e Energy's technical requirements and are verified as such by a third party, or purchasing renewable electricity through the institution's electric utility through a certified green power purchasing option.

Since this credit is intended to recognize institutions that are actively supporting the development and use of clean and renewable energy, neither the electric grid mix for the region in which the institution is located nor the grid mix reported by the electric utility that serves the institution count for this credit.

The following renewable systems are eligible for this credit:

- Concentrated solar thermal
- Geothermal systems that generate electricity
- Low-impact hydroelectric power
- Solar photovoltaic
- Wave and tidal power

- Wind

Biofuels from the following sources are eligible:

- Agricultural crops
- Agricultural waste
- Animal waste
- Landfill gas
- Untreated wood waste
- Other organic waste

Technologies that reduce the amount of energy used but do not generate renewable energy do not count for this credit. For example, daylighting, passive solar design, and ground-source heat pumps are not counted in this credit. The benefits of such strategies, as well as improved efficiencies achieved through using cogeneration technologies, are captured by *OP 1: Greenhouse Gas Emissions* and *OP 8: Building Energy Consumption*.

Transportation fuels, which are covered by *OP 1: Greenhouse Gas Emissions* and *OP 18: Campus Fleet*, are not included in this credit.

Submission Note:

UCI's campus-wide deployment of renewable energy systems provides distributed generation within the campus microgrid and supports the campus' leading-edge research in clean energy and microgrid/smart grid integration. This includes 895 kW of building rooftop photovoltaic (PV) panels, 109 kW of concentrated photovoltaic (CPV) ground-mounted panels, and 48 kW of PV panels mounted on a campus parking structure as part of the Irvine Smart Grid Demonstration project. As part of UCI's living laboratory for sustainability, these systems provide a test bed for renewable energy technology and smart grid integration of renewable energy systems onto the campus microgrid, supporting multiple collaborative research projects involving UCI faculty, staff, and students.

UC Irvine is quadrupling the amount of green power it generates on-site with the addition of solar photovoltaic canopies on three campus parking structure roofs. When the work is completed in the spring of 2015, more than 11,700 newly placed solar panels will generate up to 3.2 megawatts of power, the amount needed to meet the electrical needs of 1,800 homes. UCI is installing the solar PV systems under a 25-year power purchase agreement with a subsidiary of NextEra Energy Resources LLC. Under the terms of the agreement, the subsidiary will own and maintain the solar installations and sell electricity to the campus at a price below what UCI would expect to pay a utility. The panels are manufactured by SolarWorld Americas Inc., based in Hillsboro, Ore. They employ a new technology that utilizes glass vs. traditional photovoltaic backing, which makes them translucent, longer-lasting and more efficient. The solar canopies will provide shade for vehicles parked on the upper deck of each parking structure but will not be so dark that additional lighting will be required. The project is expected to reduce campus carbon emissions by 1,500 metric tons per year, about the same as taking 320 cars off the road.

"---" *indicates that no data was submitted for this field*

Clean and renewable energy from the following sources::

	Performance Year

Option 1: Clean and renewable electricity generated on-site during the performance year and for which the institution retains or has retired the associated environmental attributes	5,575 *MMBtu*
Option 2: Non-electric renewable energy generated on-site	419,978 *MMBtu*
Option 3: Clean and renewable electricity generated by off-site projects that the institution catalyzed and for which the institution retains or has retired the associated environmental attributes	0 *MMBtu*
Option 4: Purchased third-party certified RECs and similar renewable energy products (including renewable electricity purchased through a certified green power purchasing option)	27,626 *MMBtu*

Total energy consumption, performance year:

1,367,566 *MMBtu*

A brief description of on-site renewable electricity generating devices :

UCI receives clean and renewable energy from three on-site photovoltaic (PV) projects on the UCI campus. A 109 kW ground-mounted concentrated photovoltaic array (CPV Array), a 895 kW building rooftop mounted PV array, and a 48 kW parking structure mounted PV array. All three projects are implemented through power purchase agreements or other third-party agreements.

A brief description of on-site renewable non-electric energy devices:

Recovered heat from our combustion turbine power plant generates high-temperature water, which provides heating to the campus. The listed quantity of heat recovered (419,978 MMBtu) displaced at least 524,973 MMBtu of natural gas, which would have been burned to supply heat to the campus with the conventional boiler plant.

A brief description of off-site, institution-catalyzed, renewable electricity generating devices:

UC Irvine has developed and presented a Power Purchase Agreement presentation documenting the steps that must be completed, lessons learned from UCI's successful and unsuccessful requests for proposals, and the benefits of a PPA. In addition we have shared the request for proposals that UCI has used in the past to successful bid and have renewable energy installed on campus. This model and RFP have now been used by other UC campuses and the City of Irvine.

A brief description of the RECs and/or similar renewable energy products:

Third-party Renewable Energy Credits (RECs) that have been purchased by the campus are certified through the Green-e program.

The website URL where information about the institution's renewable energy sources is available:

http://www.apep.uci.edu/3/research/pdf/UCIMicrogridWhitePaper_FINAL_071713.pdf

Grounds

This subcategory seeks to recognize institutions that plan and maintain their grounds with sustainability in mind. Beautiful and welcoming campus grounds can be planned, planted, and maintained in any region while minimizing the use of toxic chemicals, protecting wildlife habitat, and conserving water and resources.

Credit
Landscape Management
Biodiversity

Landscape Management

Responsible Party

Richard Demerjian
Director
Office of Environmental Planning and Sustainability

Criteria

Institution’s grounds include areas that are managed at one or more of the following levels:

1) Managed in accordance with an Integrated Pest Management (IPM) Plan

2) Managed in accordance with a sustainable landscape management program

And/or

3) Organic, certified and/or protected

The level at which an area of grounds is managed may be determined as outlined in the table below:

Management Level	Standards and/or Certifications Required
1) IPM Plan	IPM plan calls for: • Using least-toxic chemical pesticides, • Minimum use of chemicals, and • Use of chemicals only in targeted locations and only for targeted species

2) Sustainable Landscape Management Program	The program includes formally adopted guidelines, policies and/or practices that cover all of the following: • Integrated pest management (see above) • Plant stewardship - protecting and using existing vegetation (e.g. through the use of a tree care plan), using native and ecologically appropriate plants, and controlling and managing invasive species • Soil stewardship - organic soils management practices that restore and/or maintain a natural nutrient cycle and limit the use of inorganic fertilizers and chemicals • Use of environmentally preferable materials - utilizing reused, recycled and local and sustainably produced landscape materials • Hydrology and water use - restoring and/or maintaining the integrity of the natural hydrology by promoting water infiltration, minimizing or eliminating the use of potable water for irrigation, and protecting/restoring riparian, wetland, and shoreline habitats and lost streams • Materials management and waste minimization - composting and/or mulching waste from groundskeeping, including grass trimmings • Snow and ice management (if applicable) - implementing technologies or strategies to reduce the environmental impacts of snow and ice removal
3) Organic, Certified and/or Protected	Protected areas and land that is: • Maintained in accordance with an organic land care standard or sustainable landscape management program that has eliminated the use of inorganic fertilizers and chemical pesticides, fungicides and herbicides in favor of ecologically preferable materials • Certified Organic • Certified under the Forest Stewardship Council (FSC) Forest Management standard • Certified under the Sustainable Sites Initiative™ (SITES™) and/or • Managed specifically for carbon sequestration (as documented in policies, land management plans or the equivalent)

Land that meets multiple criteria should not be double-counted. An area of grounds that does not meet the standards specified for a particular management level should be reported at the next appropriate level for which it does meet the standards. For example, a landscape management program that includes an IPM plan and meets some, but not all, of the other standards listed for a sustainable landscape management plan should be reported at level 1 (IPM Plan).

Submission Note:

UC Irvine was recognized by the National Arbor Day Foundation for the 2014 Partnership Award for its management of UCI's urban forest. This award recognized UCI's collaboration with the Irvine Ranch Water District and other community partners to manage a volunteer-based on-campus nursery which provides locally grown native and drought tolerant shade trees which are planted primarily by student and community volunteers on campus and in the local community to support UCI sustainable landscape goals.

"---" *indicates that no data was submitted for this field*

Figures required to calculate the total area of managed grounds::

	Area
Total campus area	1,475 *Acres*
Footprint of the institution's buildings	192 *Acres*
Area of undeveloped land, excluding any protected areas	816 *Acres*

Area of managed grounds that is::

	Area
Managed in accordance with an Integrated Pest Management (IPM) Plan	0 *Acres*
Managed in accordance with a sustainable landscape management program that includes an IPM plan and otherwise meets the criteria outlined	56 *Acres*
Managed organically, third party certified and/or protected	359 *Acres*

A copy of the IPM plan:

UCI IPM Plan6_5_12.pdf

The IPM plan :

UC Irvine's pest control program is centered on an Integrated Pest Management (IPM) system that employs physical, mechanical, cultural, biological, and educational methods to limit pest problems. Where a chemical pesticide is required as a last resort to control pests, the least toxic chemical pesticide is used. Basic pest management principles allow the campus community to prevent pest problems and find the best pest control solutions. The basic principles include storing food appropriately, keeping work areas clean and uncluttered, removing recycling and trash regularly, and checking insect entry points to make sure they are properly sealed.

The goals of the IPM program at UCI are:
1. Protect human health and the surrounding environment by employing a range of preventative strategies and using least-toxic products for pest control and eradication.
2. Inspect and monitor pest populations and locations to enhance control strategies.
3. Minimize the quantity and toxicity of chemicals used for pest management.
4. Minimize environmental impacts by using species-specific pesticides and targeting application areas carefully.
5. Establish clear criteria for acceptable circumstances in which using a pesticide other than a least-toxic pesticide is necessary; toxic pesticides shall only be used when there is a threat to public health and safety, or to prevent economic or environmental damage, and only after other alternatives have been implemented and are shown to be ineffective.
6. Provide building occupants and visitors with advanced notice of IPM activities involving use of a pesticide other than a least-toxic pesticide.

A brief summary of the institution's approach to sustainable landscape management:

The Green and Gold Plan established four planning and management goals with supporting objectives:

Goal 1. Develop a landscape that is sustainable and provides for long-term conservation of resources: energy, water, labor, and reduced production of green waste.

Water Conservation—Utilize plant materials, design and planting techniques, and irrigation systems that minimize water usage.
Plant Suitability—Use native and other environmentally suitable plant materials.
Species and Age Diversity—Ensure both diversity of species and diversity of age in the urban forest. Trees of the same size and age tend to decline and die during the same period causing costly planning and maintenance problems and necessitating long periods of re-growth.
De-Intensification of Eucalyptus Trees—Remove existing eucalyptus trees due to hazards or decline and replace with native and drought tolerant species which will introduce age diversity in the central campus.

Goal 2. Develop campus landscaping and open space networks that maximize local and regional natural resource values.

Habitat Value—Utilize native plant materials that provide high wildlife foraging value.
Habitat and Open Space Linkages—Develop habitat corridors utilizing UCI's historic drainage ways, or arroyos, that connect the campus with regional open space areas such as the San Joaquin Hills and the wetland areas of the Upper Newport Bay, San Joaquin Freshwater Marsh, and San Diego Creek. Protect existing habitat resources. Restore, as networks of corridors and habitat sites, the isolated patches and discontinuous landscape corridors that were created under the original LRDP development. This will benefit the campus and also support regional habitat planning goals.
Preservation—Preserve natural features and environmentally significant areas. Retain the character of campus topography, ridge lines, view sheds, and vistas. Preserve historic landscape.

Goal 3. Develop landscaping that provides the greatest functional value consistent with comprehensive campus planning and design objectives.

Maximize Functionality—Multiple functions, beyond aesthetic considerations, must be provided: define spaces, provide solar shading, define circulation elements, provide visual screening, reduce scale of monumental campus buildings, create public open spaces, and provide recreational amenities.
Design Consistency—Implement campus landscape that is consistent with, and supports, campus planning and design objectives to provide a unifying framework, place identity, and human scale to the campus.
Institutional Quality—Utilize plant materials, hardscape, and street furniture of institutional quality (i.e., long-lived, pest resistant, and durable).

Goal 4. While selection of appropriate plant materials and proper planting and irrigation techniques are crucial first steps in developing sustainable landscaping, it is equally important that adequate management programs are in place to preserve this asset.

Pruning—Prune to remove hazards and to improve vigor and aesthetics.
Fertilization—Environmentally responsible nutrient management to maintain plant health and reduce susceptibility to pests, diseases, and environmental stresses.
Inspection—Scheduled inspections for overall health, safety, and appearance.
Removal and Replacement—Even with good tree management, all trees will ultimately decline and require replacement. When removals are required, they are evaluated within these criteria: 1) dead or dying trees; 2) trees that pose a hazard to people or may cause significant damage to buildings, property, or hardscape; and 3) trees growing in undesirable locations.
Protection—Control disease and pests through an integrated and environmentally responsible pest management program. Protect from physical hazards.
Green Waste—To minimize waste and meet solid waste regulatory requirements, all trimmings should be processed into mulch and used to control weeds, control erosion, retain soil moisture, and provide nutrients.
Habitat Areas—While habitat areas will generally require far less ongoing maintenance than more urban landscape areas, special management is required for protection of habitat value and for teaching and research activities in these areas.

As a living laboratory, UC Irvine views sustainable landscape management as an engagement opportunity for the campus and community. In this regard UC Irvine was awarded with the National Arbor Day Foundation's highest national award for volunteer engagement as a result of UCI's collaborative Shadetree Nursery program which pursues urban forestry and habitat enhancement engagement through locally grown native trees and shrubs that are planted through student and community volunteers on sites throughout campus and the local community.

A brief description of how the institution protects and uses existing vegetation, uses native and ecologically appropriate plants, and controls and manages invasive species:

The Green and Gold Plan identifies native and climate appropriate plants for use on campus and management of the campus open space networks to maximize habitat and natural resource value. UCI sustainability staff, faculty, and students work collaboratively on campuswide habitat protection and enhancement programs involving the creation or restoration of native plant associations to provide native habitat in campus upland, wetland, and riparian habitat types.

Current projects have included the replacement of a turf area adjacent to the administration building and a new bikeway that have both been landscaped with California native plants. Future projects are looking at reducing underutilized turf areas and replacing with California native plants through student volunteer planting events.

Facilities Management controls invasive species including artichoke thistle, pampas grass, tamarisk, and other invasive species that threaten habitat resources. UCI grounds staff follows the IPM plan to manage invasive species.

A brief description of the institution’s landscape materials management and waste minimization policies and practices:

UC Irvine composts 100% of its landscape waste. The campus uses two methods of mulching: It uses self-mulching mowers on grass and annually chips 150-plus tons of green waste for compost used in planting beds and park trails on campus.

A brief description of the institution’s organic soils management practices:

The following is from the UC Irvine Implementation Procedures for Erosion Control and Landscape Management plan, adopted in May 2012:

UCI employs shredded or chipped plant materials with an appropriately high wood content as a mulch cover over the soil in planting beds and other exposed soil areas in the landscape. Mulch insulates plant roots, reduce weeds, minimize water loss, and control erosion, dust, and mud problems. Decomposition of mulch improves the condition of the soil and adds nutrients to the plants. Wherever feasible, UCI selects native and drought tolerant plant materials that do not require excessive use of fertilizers as the first step in controlling fertilizer use. When fertilizer is applied the following procedures are implemented.
• UCI grounds staff is trained to apply fertilization using the correct application rates and timing for each targeted plant species to avoid excessive plant growth, diminish the potential for runoff and water quality impacts, and promote healthy, disease, and pest resistant plants.
• UCI grounds staff are trained to use slow-release and organic-based formulas based on plant nutrient needs. This will reduce excessive growth that increases the need for pruning and mowing. UCI uses organic based fertilizers that are incorporated into the soil within planting beds to avoid runoff. A list of approved fertilizer types are listed below. MSDS sheets are made available upon request (see Responsible Party at the conclusion of this section).

A brief description of the institution’s use of environmentally preferable materials in landscaping and grounds management:

Because UC Irvine uses reclaimed water (which contains higher levels of nutrients than potable water) for irrigation and has a robust mulching program with compost produced onsite through greenwaste recycling, fertilizer is rarely used on grounds. If fertilizer is used, it is organic. The campus also benefits from having an on-site nursery that provides a majority of trees that are locally grown along with some native shrubs and grasses.

A brief description of how the institution restores and/or maintains the integrity of the natural hydrology of the campus:

The Long Range Development Plan identifies preservation and enhancement of the natural arroyos (season drainage features). As part of the natural hydrology of the campus these arroyos serve important functions as riparian habitat for native species, rainwater management, and recreational corridors to the campus community.

UC Irvine's Water Action Plan includes provides for Low Impact Design (LID) as required strategy for all new construction and major redevelopment projects. The campus already has a variety of sustainable stormwater treatment facilities including bioswales, sand filter beds, percolation galleries, and natural treatment facilities that help protect the integrity of its watershed. The Office of Environmental Planning & Sustainability is working with research programs on campus to develop demonstration projects incorporating vegetated swales to treat runoff associated with on-going operations.

A brief description of how the institution reduces the environmental impacts of snow and ice removal (if applicable):

Not applicable in this climate

A brief description of any certified and/or protected areas:

UC Irvine manages two protected habitat reserves at the Irvine Campus and two additional protected habitat reserves off-campus.

The 135-acre Ecological Reserve at the Irvine Campus is a part of the regional 37,000 Natural Community Conservation Plan (NCCP) habitat reserve. The UCI reserve land is protected, managed, and monitored for habitat and wildlife conservation by UC Irvine in partnership with other NCCP public and private landowners in the community and State and federal resource agencies to enhance regional habitat value. UC Irvine was the first University to participate in the successful planning, formation, and collaborative management of an NCCP reserve.

The 202 acre San Joaquin Marsh Reserve at the Irvine campus is protected and managed by UCI to support a variety of wetland habitat types. Along the Pacific Flyway, the marsh is a stopping place for over 100 migratory bird species. The marsh also serves as an educational and research location for the University.

The Steel Burnand Desert Research Center is a 78-site protected and managed as habitat near the Anza Borrego Desert State Park in San Diego County. Located within the Sonoran Desert, the site contains a variety of plant and animal species native to the region.

The 306 acre Burns Pinon Ridge Reserve, managed by UC Irvine, is located in the western Mojave Desert near Joshua Tree National Park. Habitats within the reserve include pinon-juniper woodland, Joshua tree woodland, montane chaparral, desert wash, and freshwater seep.

Is the institution recognized by the Arbor Day Foundation's Tree Campus USA program (if applicable)?:

Yes

The website URL where information about the institution’s sustainable landscape management programs and practices is available:

http://www.ceplanning.uci.edu/greengold.html

Biodiversity

Criteria

The institution conducts one or both of the following:

- An assessment to identify endangered and vulnerable species (including migratory species) with habitats on institution-owned or -managed land

  And/or

- An assessment to identify environmentally sensitive areas on institution-owned or -managed land

The institution has plans or programs in place to protect or positively affect the species, habitats and/or environmentally sensitive areas identified.

Assessments conducted and programs adopted by other entities (e.g. government, university system, NGO) may count for this credit as long as the assessments and programs apply to and are followed by the institution.

This credit was marked as **Not Pursuing** so Reporting Fields will not be displayed.

Purchasing

This subcategory seeks to recognize institutions that are using their purchasing power to help build a sustainable economy. Collectively, colleges and universities spend many billions of dollars on goods and services annually. Each purchasing decision represents an opportunity for institutions to choose environmentally and socially preferable products and services and support companies with strong commitments to sustainability.

Credit
Electronics Purchasing
Cleaning Products Purchasing
Office Paper Purchasing
Inclusive and Local Purchasing
Life Cycle Cost Analysis
Guidelines for Business Partners

Electronics Purchasing

Responsible Party

Rick Coulon
Director
Purchasing and Risk Services

Criteria

Part 1

Institution has an institution-wide stated preference to purchase computers and/or other electronic products that are EPEAT registered or meet similar multi-criteria sustainability standards for electronic products. This can take the form of purchasing policies, guidelines, or directives.

Policies and directives adopted by entities of which the institution is part (e.g. government or university system) may count for this credit as long as the policies apply to and are followed by the institution.

Part 2

Institution purchases EPEAT registered products for desktop and notebook/laptop computers, displays, thin clients, televisions and imaging equipment.

This credit does not include servers, mobile devices such as tablets and smartphones, or specialized equipment for which no EPEAT certified products are available.

Submission Note:

Orders represent computers purchased for administrative operations through Procurement during calendar year 2014. The sample was limited to the first 6 months of the year and amount doubled as we implemented a new purchasing system and data is not yet available. Sampling was done and most all purchases are through Dell with Epeat Gold product.

"---" *indicates that no data was submitted for this field*

Does the institution have an institution-wide stated preference to purchase computers and/or other electronic products that are EPEAT registered or meet similar multi-criteria sustainability standards for electronic products?:

Yes

A copy of the electronics purchasing policy, directive, or guidelines:

UCSustainablePractice.pdf

The electronics purchasing policy, directive, or guidelines :

The University of California's Sustainable Practices Policy, originally issued in July 2004 and updated in November 18, 2013, has an entire section on Environmentally Preferable Purchasing Practices. The sections referencing EPEAT are shown below. UC Irvine primilary purchases equipment with the "gold" registration by identifying preferred equipment packages.

Electronics Equipment
24. All desktop computers, laptops, and computer monitors purchased by the University are required to have achieved a minimum Bronze-level registration or higher under the Electronic Products Environmental Assessment Tool (EPEAT®), where applicable.
25. Preference will be given for electronics products that have achieved EPEAT® Silver or EPEAT® Gold registration. The registration criteria and a list of all registered equipment are provided at

http://www.epeat.net

.

A brief description of steps the institution has taken to ensure that the purchasing policy, directives, or guidelines are followed:

UC Irvine has computer support professionals who help identify needs and select packaged computer selections to meet our needs and advise customers.

Does the institution wish to pursue to pursue Part 2 of this credit (expenditures on EPEAT registered electronics)?:

Yes

Expenditures on EPEAT registered desktop and laptop computers, displays, thin clients, televisions, and imaging equipment::

	Expenditure Per Level
EPEAT Bronze	0 *US/Canadian $*
EPEAT Silver	0 *US/Canadian $*
EPEAT Gold	1,400,000 *US/Canadian $*

Total expenditures on desktop and laptop computers, displays, thin clients, televisions, and imaging equipment:

1,400,000 *US/Canadian $*

The website URL where information about the institution's electronics purchasing policy, directive, or guidelines is available:

http://www.ucop.edu/ucophome/coordrev/policy/sustainable-practices-policy.pdf

Cleaning Products Purchasing

Responsible Party

Rick Coulon
Director
Purchasing and Risk Services

Criteria

Part 1

Institution has an institution-wide stated preference to purchase cleaning and janitorial products that are Green Seal™ or UL Environment (EcoLogo)™ certified and/or meet similar multi-criteria sustainability standards for cleaning and janitorial products. This can take the form of purchasing policies, guidelines, or directives.

Policies and directives adopted by entities of which the institution is part (e.g. government or the university system) may count for this credit as long as the policies apply to and are followed by the institution.

Part 2

Institution's main cleaning or housekeeping department(s) and/or contractor(s) purchase Green Seal or UL Environment (EcoLogo) certified cleaning and janitorial products.

Cleaning and janitorial products include, at minimum:

- Cleaning/degreasing agents
- General-purpose, bathroom, glass, and carpet cleaners
- Biologically-active cleaning products (enzymatic and microbial products)
- Floor-care products, e.g. floor finish and floor finish strippers
- Hand cleaners
- Sanitary paper products, e.g. toilet tissue, facial tissue, paper towels, napkins, and placemats
- Plastic film products (e.g. garbage bags/liners)
- Laundry care products including powder, liquid or pre-measured dosage laundry detergents, stain removers and dryer sheets
- Specialty surface cleaning products and odor removers, including but not limited to: boat cleaning products; deck and outdoor furniture cleaning products; graffiti removers; metal cleaning products; motor vehicle (automotive/tire/wheel) cleaning products; motor vehicle windshield washing fluid; optical lens cleaning products; oven cleaning products; upholstery cleaning products; and other cleaning products sold for specific specialty uses

Submission Note:

UCI sources products that meet third-party green criteria for all cleaning applications where a suitable product is available and continually researches new green cleaning product applications as part of UCI's Green Cleaning Program. This approach has resulted in a success rate approaching 90% (currently 88%) of products meeting Green Seal, EPA Design for the Environment (DFE) Certified, and US Green Building Council LEED EBOM criteria.

Does the institution have an institution-wide stated preference to purchase third party certified cleaning and janitorial products?:

Yes

A copy of the green cleaning product purchasing policy, directive, or guidelines:

Green Cleaning Policy UC Irvine (2).docx

The green cleaning product purchasing policy, directive, or guidelines:

Low environmental impact cleaning products certified by Green Seal standard
(GS-37) shall be used.

• A log will be kept that details all housekeeping chemicals used or stored on the premises (stored products include those that are no longer used, but still in the building). Attachments to the log shall include manufacturer's Material Safety Data Sheets (MSDS) and Technical Bulletins. The log shall identify:

-- An MSDS and/or label from the manufacturer specifying that the product meets the VOC content level for the appropriate product category as found in the California Code of Regulations.
-- A copy of the Green Seal Certification, or
-- If the product has not been certified by Green Seal, the manufacturer will provide test data documenting that the product meets each of the environmental health & safety criteria set forth in Green Seal Standard GS-37, or that the product meets California Code of Regulations for maximum allowable VOC content.

A brief description of steps the institution has taken to ensure that the purchasing policy, directives, or guidelines are followed:

Custodial staff have been engaged in creating the policy and ensuring its use. Potential users of cleaning products are directed to the campus URL listing links to green products. Facilities Management personnel are made aware of green products and encouraged to use them.

Does the institution wish to pursue Part 2 of this credit (expenditures on cleaning and janitorial products)?:

Yes

Expenditures on Green Seal and/or UL Environment (EcoLogo) certified cleaning and janitorial products:

422,724 *US/Canadian $*

Total expenditures on cleaning and janitorial products:

502,000 *US/Canadian $*

Has the institution's main cleaning or housekeeping department(s) and/or contractor(s) adopted a Green Seal or ISSA

certified low-impact, ecological (“green”) cleaning program?:

Yes

A brief description of the institution’s low-impact, ecological cleaning program:

High-Performance Green Cleaning Plan

The purpose and intent of the UC Irvine Green Cleaning Plan is to minimize exposure of building occupants and maintenance personnel to potentially hazardous chemical, biological and particle contaminants which may adversely impact indoor air quality, health, building finishes and systems, and to minimize the impact of the building maintenance program on the environment. Additionally, it is intended to reduce the risk of both occupants and cleaning personnel from injury and/or health problems.

Cleaning methods set forth in this plan emphasize the removal of indoor pollutants and maintaining a safe and healthy environment while minimizing the amount of product used and the amount of waste that is created. Products include general purpose cleaners, bathroom cleaners, glass cleaners, carpet cleaners, disinfectants, floor care products, hand soaps, paper supplies for cleaning, paper supplies for bathrooms, and plastic trash bags. The product recommendations included in this plan are meant to meet or exceed LEED EBOM EQ Prerequisite 3 of acceptable cleaning products; however, substitute products may be used, provided they meet similar criteria. Products that do not contain environmental contaminants help reduce the ecological impact of cleaning products that are flushed into the water supply/filtration system. Green cleaning is one aspect in building maintenance that can reduce VOC as well as bacteria and fungi.

The promotion of a high-quality indoor environment High-Performance Green Cleaning
Plan will have positive beneficial effects on occupant/employee health and productivity, life-cycle building maintenance costs, and the overall environment.

A copy of the sections of the cleaning contract(s) that reference certified green products:

Green Cleaning Policy UC Irvine (2).docx

The sections of the cleaning contract(s) that reference certified green products:

Low environmental impact cleaning products certified by Green Seal standard
(GS-37) shall be used.

• A log will be kept that details all housekeeping chemicals used or stored on the premises (stored products include those that are no longer used, but still in the building). Attachments to the log shall include manufacturer’s Material Safety Data Sheets (MSDS) and Technical Bulletins. The log shall identify:

-- An MSDS and/or label from the manufacturer specifying that the product meets the VOC content level for the appropriate product category as found in the California Code of Regulations.
-- A copy of the Green Seal Certification, or
-- If the product has not been certified by Green Seal, the manufacturer will provide test data documenting that the product meets each of the environmental health & safety criteria set forth in Green Seal Standard GS-37, or that the product meets California Code of Regulations for maximum allowable VOC content.

The website URL where information about the institution’s green cleaning initiatives is available:

http://snap.uci.edu/viewXmlFile.jsp?resourceID=2639

Office Paper Purchasing

Responsible Party

Rick Coulon
Director
Purchasing and Risk Services

Criteria

Part 1

Institution has an institution-wide stated preference to purchase office paper that has recycled content, is certified by the Forest Stewardship Council (FSC), and/or is certified to meet similar multi-criteria sustainability standards for paper. This can take the form of purchasing policies, guidelines, or directives.

Policies and directives adopted by entities of which the institution is part (e.g. government or the university system) may count for this credit as long as the policies apply to and are followed by the institution.

Part 2

Institution purchases office paper with post-consumer recycled, agricultural residue, and/or FSC certified content.

Submission Note:

UCI has adopted a far-reaching 100% post-consumer recycled paper policy, the first such policy in the UC system and one of most far-reaching of any university in California. As a result, campus control points and copy vendors will purchase 100% recycled paper for all standard printing and copying needs. Implementation includes strategic sourcing in partnership with the recycled paper suppliers to provide competitive pricing to the campus community and an outreach program to educate the campus community on recycled paper quality and attributes.

Data reported above is based on primary paper supplier data

"---" *indicates that no data was submitted for this field*

Does the institution have an institution-wide stated preference to purchase office paper that has recycled content and/or is certified to meet multi-criteria sustainability standards for paper?:

Yes

A copy of the paper purchasing policy, directive or guidelines:

UCI Administrative Policies & Procedures_Section 707-10_Procedure.pdf

The paper purchasing policy, directive or guidelines:

UCI has adopted a far-reaching 100% post-consumer recycled paper policy, the first such policy in the UC system and one of most far-reaching of any university in California. As a result, campus control points and copy vendors will purchase 100% recycled paper for all standard printing and copying needs. Implementation includes strategic sourcing in partnership with the recycled paper suppliers to provide competitive pricing to the campus community and an outreach program to educate the campus community on recycled paper quality and attributes.

http://www.policies.uci.edu/adm/procs/700/707-10.html

H.3.
Standard white copy paper purchases are to be made from 100 percent post-consumer waste (PCW) recycled paper unless a special need exists. 30% PCW is the minimum standard for additional paper products including but not limited to note pads, legal paper, color paper, multi-purpose paper, etc.; however, 100% PCW recycled paper is recommended whenever possible (see UC Sustainable Practices Policy).

A brief description of steps the institution has taken to ensure that the purchasing policy, directives, or guidelines are followed :

The University of California has strategic sourcing agreements that promote the use of recycled paper. Recycled paper is heavily advertised and easily identified when shopping. We have adopted a policy of using 100% recycled office paper and are in the process of implementing this across the campus. Our e-commerce system has added 100% recycled paper a campus wide favorite which promotes the visibility of recycled paper and encourages its purchase.

Does the institution wish to pursue Part 2 of this credit (expenditures on office paper)?:

Yes

Expenditures on office paper with the following levels of post-consumer recycled, agricultural residue, and/or FSC certified content::

	Expenditure Per Level
10-29 percent	500 *US/Canadian $*
30-49 percent	210,000 *US/Canadian $*
50-69 percent	32,500 *US/Canadian $*
70-89 percent (or FSC Mix label)	0 *US/Canadian $*
90-100 percent (or FSC Recycled label)	13,150 *US/Canadian $*

Total expenditures on office paper :

340,000 *US/Canadian $*

The website URL where information about the paper purchasing policy, directive, or guidelines is available:

http://www.policies.uci.edu/adm/procs/700/707-10.html

Inclusive and Local Purchasing

Criteria

Part 1

Institution has an institution-wide stated intent to support disadvantaged businesses, social enterprises, and/or local community-based businesses.

Support could take the form of giving preference during RFP processes, conducting targeted outreach to these businesses about opportunities to work with the institution, and/or other efforts to increase purchases made from such businesses.

Part 2

Institution makes purchases from companies that include disadvantaged businesses, social enterprises and/or local community-based businesses.

Purchases that meet multiple criteria listed above should not be double counted. Food and beverage purchases, which are covered by *OP 6: Food and Beverage Purchasing* and *OP 7: Low Impact Dining*, are not included in this credit.

This credit was marked as **Not Pursuing** so Reporting Fields will not be displayed.

Life Cycle Cost Analysis

Criteria

Institution employs Life Cycle Cost Analysis (LCCA) as a matter of policy and practice when evaluating energy- and water-using products and systems. Practices may include structuring RFPs so that vendors compete on the basis of lowest total cost of ownership (TCO) in addition to (or instead of) purchase price.

This credit was marked as **Not Pursuing** so Reporting Fields will not be displayed.

Guidelines for Business Partners

Responsible Party

Rick Coulon
Director
Purchasing and Risk Services

Criteria

Institution has and acts on policies, guidelines and/or agreements that set expectations about the social and environmental responsibility of its business partners. The policies, guidelines and/or agreements require new and/or existing vendors and contractors and/or franchisees to adhere to:

1) Minimum environmental standards and practices defined by the institution, for example as outlined by the institution's sustainability policies

And/or

2) Minimum standards and practices governing employee wages, benefits, working conditions and rights that are consistent with fundamental International Labor Organization (ILO) conventions.

All enterprises with employees on-site as part of regular campus operations (e.g. contractors and franchisees) and other standing and/or formal business relationships (e.g. regular vendors and contracted services) are included.

Businesses that produce and/or sell licensed articles bearing the institution's trademarked logo ("licensees") are not included. They are covered in *EN 15: Trademark Licensing*.

The credit acknowledges institutional engagement in selecting its business partners and guiding them toward sustainability. Policies, guidelines or practices of the businesses themselves do not count for this credit in the absence of institutional selection criteria and/or guidance. Requiring compliance with existing legislation does not count on its own, but may be included as part of broader requirements that meet the criteria outlined above.

Policies adopted by entities of which the institution is part (e.g. government or university system) may count for this credit as long as the policies apply to and are followed by the institution.

Submission Note:

UC Irvine asks its business partners to adhere to UC's policies and guidelines concerning sustainability, but in some instances, this is not contractually required.

"---" *indicates that no data was submitted for this field*

How many of the institution's business partners are covered by policies, guidelines and/or agreements that require

adherence to minimum environmental standards?:

All

How many of the institution’s business partners are covered by policies, guidelines and/or agreements that require adherence to minimum standards governing employee wages, benefits, working conditions and rights?:

All

A copy of the policies, guidelines, and/or agreements with the institution's business partners (or a representative sample):

UC_SustainablePracticesPolicy_November2013.pdf

The policies, guidelines, and/or agreements with the institution's business partners (or a representative sample):

University of California Policy on Sustainable Practices

http://policy.ucop.edu/doc/3100155/Sustainable%20Practices

G. Environmentally Preferable Purchasing
1. Environmentally preferable purchasing underlies and enables all other areas of sustainable practice in this Policy. Therefore, the University will maximize its procurement of environmentally preferable products and services.
2. The University will use its purchasing power to target environmentally preferable products and services for volume-discounted pricing to make them cost-competitive with conventional products and services.
3. For products and services without available environmentally preferable alternatives, the University will work with its existing and potential suppliers and leverage the University’s purchasing power and market presence to develop sustainable choices.
4. The University will integrate sustainability requirements into its practices for competitive bidding in materiel and services procurement, allowing for suppliers that meet these requirements to earn additional evaluation points.
5. Packaging for all products procured by the University should be designed, produced, and managed in an environmentally sustainable manner. The University shall seek products that have take-back programs, as appropriate.
6. When requested, suppliers citing environmentally preferable purchasing claims shall provide proper certification or detailed information on environmental claims, including benefits, durability, and take-back, reuse, and recyclable properties. Additionally, suppliers are responsible for providing proof of University of California-accepted third-party certification based upon the requirements of the University’s Procurement Services Department located in the Office of the President.
7. The goal of this section G shall be applied within the constraints of research needs and budgetary requirements and in compliance with applicable rules, regulations and laws.

University of California Terms and Conditions for Suppliers

http://www.ucop.edu/procurement-services/_files/uc-terms-and-conditions.pdf

ARTICLE 14 – EQUAL OPPORTUNITY AFFIRMATIVE ACTION. Supplier will abide by the requirements set forth in Executive Orders 11246 and 11375. Where applicable, Supplier will abide by 41 CFR §§ 60-1.4(a), 60-300.5(a) and 60-741.5(a), incorporated by

reference with this statement: “This contractor and subcontractor shall abide by the requirements of 41 CFR §§ 60-1.4(a), 60-300.5(a) and 60-741.5(a). These regulations prohibit discrimination against qualified individuals based on their status as protected veterans or individuals with disabilities, and prohibit discrimination against all individuals based on their race, color, religion, sex, or national origin. Moreover, these regulations require that covered prime contractors and subcontractors take affirmative action to employ and advance in employment individuals without regard to race, color, religion, sex, national origin, protected veteran status or disability.” With respect to activities occurring in the State of California, Supplier agrees to adhere to the California Fair Employment and Housing Act. Supplier will provide UC on request a breakdown of its labor force by groups as specified by UC, and will discuss with UC its policies and practices relating to its affirmative action programs. Supplier will not maintain or provide facilities for employees at any establishment under its control that are segregated on a basis prohibited by federal law. Separate or single-user restrooms and necessary dressing or sleeping areas must be provided, however, to ensure privacy.

A brief description of programs and strategies institution has implemented to ensure that the guidelines are followed, including a brief description of instances when the guidelines have changed purchasing behavior, if applicable:

UC Irvine, in collaboration with the University of California system, has implemented effective sustainability programs, processes and policies. Environmentally friendly practices are built into our strategic sourcing agreements. Vendors are encouraged to use sustainable practices in the packaging and shipment of products. The use of recyclable, recycled, and environmentally sound products is encouraged throughout the UC system. UC rvineI operates its own second-hand store that specializes in finding continued life for used equipment and supplies, while diverting these items from the landfill.

Specific sustainability practices are written into agreements with various vendors:
• Elimination of packaging where applicable
• Use of recyclable packing materials, biodegradable or non-toxic
• Take-back programs that require recycling
• Use of recyclable materials
• Availability and highlighting of green options
• e-Steward Certification for recycling of electronics

The website URL where information about the institution’s guidelines for its business partners is available:

http://sustainability.universityofcalifornia.edu/policy.html

Transportation

This subcategory seeks to recognize institutions that are moving toward sustainable transportation systems. Transportation is a major source of greenhouse gas emissions and other pollutants that contribute to health problems such as heart and respiratory diseases and cancer. Due to disproportionate exposure, these health impacts are frequently more pronounced in low-income communities next to major transportation corridors. In addition, the extraction, production, and global distribution of fuels for transportation can damage environmentally and/or culturally significant ecosystems and may financially benefit hostile and/or oppressive governments.

At the same time, campuses can reap benefits from modeling sustainable transportation systems. Bicycling and walking provide human health benefits and mitigate the need for large areas of paved surface, which can help campuses to better manage storm water. Institutions may realize cost savings and help support local economies by reducing their dependency on petroleum-based fuels for transportation.

Credit
Campus Fleet
Student Commute Modal Split
Employee Commute Modal Split
Support for Sustainable Transportation

Campus Fleet

Responsible Party

Ramon Zavala
Sustainable Transportation Supervisor
Transportation Services

Criteria

Institution supports alternative fuel and power technology by including in its motorized vehicle fleet vehicles that are:

A. Gasoline-electric hybrid

B. Diesel-electric hybrid

C. Plug-in hybrid

D. 100 percent electric

E. Fueled with Compressed Natural Gas (CNG)

F. Hydrogen fueled

G. Fueled with B20 or higher biofuel for more than 4 months of the year

And/or

H. Fueled with locally produced, low-level (e.g. B5) biofuel for more than 4 months of the year (e.g. fuel contains cooking oil recovered and recycled on campus or in the local community)

For this credit, the institution's motorized fleet includes all cars, carts, trucks, tractors, buses and similar vehicles used for transporting people and/or goods, including both leased vehicles and vehicles that are institution-owned and operated. Heavy construction equipment (e.g. excavators and pavers), maintenance equipment (e.g. lawn-mowers and leaf blowers), and demonstration/test vehicles used for educational purposes are not included in this credit.

Vehicles that meet multiple criteria (e.g. hybrid vehicles fueled with biofuel) should not be double-counted.

Submission Note:

Anteater Express, UCI's student-operated shuttle service, will add its first hydrogen fuel cell bus to the shuttle fleet in partnership with the National Fuel Cell Research Center at UCI, the California Energy Commission, CalStart, Ballard Power Systems, El Dorado National, and BAE Systems. Anteater Express expects to take possession of the bus on April 15 and will introduce it to the campus community on April 18 at Celebrate UCI. This will be the first hydrogen fuel cell bus in use at a University of California campus.(This information is not included elsewhere in the response.)

The partnership between UCI's Advanced Power and Energy Program and campus fleet services has made UCI a national leader in the research, development, and deployment of alternative fuel technology in fleet vehicle applications.

Total number of vehicles in the institution's fleet :

563

Number of vehicles in the institution's fleet that are::

	Number of Vehicles
Gasoline-electric, non-plug-in hybrid	5
Diesel-electric, non-plug-in hybrid	0
Plug-in hybrid	18
100 percent electric	190
Fueled with compressed natural gas (CNG)	1
Hydrogen fueled	17
Fueled with B20 or higher biofuel for more than 4 months of the year	40
Fueled with locally produced, low-level (e.g. B5) biofuel for more than 4 months of the year	0

A brief description of the institution's efforts to support alternative fuel and power technology in its motorized fleet:

The UCI Advanced Power and Energy program (APEP) is a world leader in the research, development, and deployment of clean energy systems. APEP, which includes the UCI-based National Fuel Cell Research Center, UCI Combustion Laboratory, and the Pacific Rim Consortium on Energy, Combustion & the Environment, leadership includes the development of alternative fuel vehicle technologies which are deployed on campus as part of UCI's campus as living laboratory for sustainability. This includes the largest (highest volume) publicly accessible hydrogen fueling station in the US and a fleet of 17 hydrogen fuel cell vehicles (FCV) deployed on campus. In addition, the APEP fleet includes 37 pure EVs and 7 plug-in hybrid vehicles deployed for sustainable energy and transportation research applications on campus and in the local community.

In addition to the APEP hydrogen vehicle fleet, nearly 50% of UCI fleet vehicles are powered by alternative fuels or utilize hybrid technology. This includes the entire UCI shuttle bus fleet (29 buses) which operate on B20 bio-diesel, 18 hybrid-electric vehicles, 180 pure electric vehicles and carts, and 8 CNG or propane vehicles. As part of a collaborative applied research program between APEP and the UCI shuttle program, a hydrogen fuel cell bus will be deployed on campus as part of the UCI shuttle fleet in spring of this year.

In 2013 UCI established the Fleet Conversion Working Group (FCWG) which includes sustainability, transportation, shuttle, and fleet operations staff to develop a business plan for conversion of the remaining UCI fleet vehicles to low carbon fuel systems. Supported through FCWG's planning efforts, the UCI shuttle fleet is preparing for complete replacement of UCI's campus fleet to electric, hybrid, CNG, or other low-carbon fuel types.

The website URL where information about the institution's support for alternative fuel and power technology is available:

http://www.nfcrc.uci.edu/3/default.aspx

Student Commute Modal Split

Responsible Party

Ramon Zavala
Sustainable Transportation Supervisor
Transportation Services

Criteria

Institution's students commute to and from campus using more sustainable commuting options such as walking, bicycling, vanpooling or carpooling, taking public transportation, riding motorcycles or scooters, riding a campus shuttle, or a combination of these options.

Students who live on campus should be included in the calculation based on how they get to and from their classes.

Submission Note:

These numbers are taken from the 2012 UCI Transportation Habits Survey (representing undergraduate students) and describe the mode split for the average day at UC Irvine. This is an academic survey that was administered through a partnership involving the UCI Institute for Transportation Studies, the Anteater Express (campus shuttle), and Transportation and Distribution Services.

"---" *indicates that no data was submitted for this field*

Total percentage of students that use more sustainable commuting options:

82.40

The percentage of students that use each of the following modes as their primary means of transportation to get to and from campus::

	Percentage (0-100)
Commute with only the driver in the vehicle (excluding motorcycles and scooters)	17.60
Walk, bicycle, or use other non-motorized means	44
Vanpool or carpool	6.10
Take a campus shuttle or public transportation	26.30
Use a motorcycle, scooter or moped	1

A brief description of the method(s) used to gather data about student commuting:

The campus population was surveyed via an online tool as part of a graduate professional report. Respondents selected which modes of transportation they used as part of their commutes to campus and surrounding destinations during a normal week.

The website URL where information about sustainable transportation for students is available:

http://www.parking.uci.edu/AT/

Employee Commute Modal Split

Responsible Party

Ramon Zavala
Sustainable Transportation Supervisor
Transportation Services

Criteria

Institution's employees (faculty, staff, and administrators) get to and from campus using more sustainable commuting options such as walking, bicycling, vanpooling or carpooling, taking public transportation, riding motorcycles or scooters, riding a campus shuttle, telecommuting, or a combination of these options.

Employees who live on campus should be included in the calculation based on how they get to and from their workplace.

Submission Note:

For the third entry (non-motorized), 30.65% commute by bike or on foot, 19.81% don't come to campus due to sick/vacation days alternate work schedules or came to work during unmeasured off-peak commute hours. We combine the non-motorized and no-show in this category because we believe that our generous alternate work schedule, vacation time, and sick time policies contribute to minimizing unnecessary commute trips to the campus.

"---" *indicates that no data was submitted for this field*

Total percentage of the institution's employees that use more sustainable commuting options:

69.35

The percentage of the institution's employees that use each of the following modes as their primary means of transportation to and from campus::

	Percentage (0-100)
Commute with only the driver in the vehicle (excluding motorcycles and scooters)	30.65
Walk, bicycle, or use other non-motorized means	50.66
Vanpool or carpool	9.58
Take a campus shuttle or public transportation	5.56

Use a motorcycle, scooter or moped	0.89
Telecommute for 50 percent or more of their regular work hours	2.66

A brief description of the method(s) used to gather data about employee commuting:

These numbers are derived from a combination of permit buy-rates and the annual South Coast Air Quality Management District commute survey (based on all employee responses) and represent the commute trip mode split on an average day at UC Irvine.

The website URL where information about sustainable transportation for employees is available:

http://www.parking.uci.edu/AT/

Support for Sustainable Transportation

Responsible Party

Ramon Zavala
Sustainable Transportation Supervisor
Transportation Services

Criteria

Part 1

The institution demonstrates its support for active (i.e. non-motorized) transportation on campus in one or more of the following ways:

Option A: Institution:

- Provides secure bicycle storage (not including office space), shower facilities, and lockers for bicycle commuters. The storage, shower facilities and lockers are co-located in at least one building/location that is accessible to all commuters.
- Provides short-term bicycle parking (e.g. racks) within 50 ft (15 m) of all occupied, non-residential buildings and makes long-term bicycle storage available within 330 ft (100 m) of all residence halls (if applicable).
- Has a “complete streets” or bicycle accommodation policy (or adheres to a local community policy) and/or has a continuous network of dedicated bicycle and pedestrian paths and lanes that connects all occupied buildings and at least one inter-modal transportation node (i.e. transit stop or station)

  And/or

- Has a bicycle-sharing program or participates in a local bicycle-sharing program

Option B: Institution is certified as a Bicycle Friendly University (at any level) by the League of American Bicyclists (U.S.) or under a similar third party certification for non-motorized transportation.

Part 2

Institution has implemented one or more of the following strategies to encourage more sustainable modes of transportation and reduce the impact of student and employee commuting. The institution:

- Offers free or reduced price transit passes and/or operates a free campus shuttle for commuters. The transit passes may be offered by the institution itself, through the larger university system of which the institution is a part, or through a regional program provided by a government agency.
- Offers a guaranteed return trip (GRT) program to regular users of alternative modes of transportation
- Participates in a car/vanpool or ride sharing program and/or offers reduced parking fees or preferential parking for car/vanpoolers
- Participates in a car sharing program, such as a commercial car-sharing program, one administered by the institution, or one administered by a regional organization
- Has one or more Level 2 or Level 3 electric vehicle recharging stations that are accessible to student and employee commuters
- Offers a telecommuting program for employees, either as a matter of policy or as standard practice
- Offers a condensed work week option for employees, either as a matter of policy or as standard practice
- Has incentives or programs to encourage employees to live close to campus

- Other strategies

Submission Note:

UCI Transportation is the first in the nation to offer mobile electric vehicle charging on a university campus. To help counter range anxiety and to assist stranded electric vehicles, our mobile EV charging system, which uses clean-burning propane, provides an electric vehicle with enough energy to reach one of the campus' 40 station-based chargers. Mobile EV charging is the newest addition to our Motorist Assistance Program, which provides complimentary services such as emergency ride home, vehicle jumpstarts and unlocks, emergency gas delivery, and tire sealant to all UCI affiliates and visitors.

"---" *indicates that no data was submitted for this field*

Does the institution provide secure bicycle storage (not including office space), shower facilities, and lockers for bicycle commuters?:

Yes

A brief description of the facilities for bicycle commuters:

UC Irvine's state-of-the-art Anteater Recreation Center (ARC) provides showers and lockers for all members, including cyclists. These facilities are available at no charge for UCI students and at a discount for UCI staff and faculty. (

http://www.campusrec.uci.edu/membership/index.asp

)

The ARC provides showers in both the male and female locker rooms. Gender neutral showers are available in Fitwell Services. These showers can be accessed during normal Fitwell Hours. ARC patrons must contact a building manager to access the gender neutral showers when Fitwell Services is closed.

UC Irvine is currently in the process of building its first external covered and secure bicycle parking area. Campus building facilities managers also allow the secure storage of commuter bicycles in their buildings' open rooms as space permits.

Does the institution provide short-term bicycle parking (e.g. racks) within 50 ft (15 m) of all occupied, non-residential buildings and make long-term bicycle storage available within 330 ft (100 m) of all residence halls (if applicable)?:

Yes

A brief description of the bicycle parking and storage facilities:

UC Irvine provides more than 1,700 bicycle parking spots on the campus core with additional bike racks available at every student housing community. UCI has expanded its available bike parking 46% over the last 3 years and continues to grow with increasing demand. The campus uses the post-and-loop standard of bike racks which allows cyclists to lock both wheels with the frame to the parking furniture without the removal of the front wheel. UCI's Bicycle Education and Enforcement Program educates campus cyclists on the rights and responsibilities of cyclists on the road, instructs cyclists as to how best secure their bikes, and actively catches campus bike thieves with dozens of arrests to date.

Plans are in place for the construction of campus bike hubs which will provide even more bike parking along with bicycle fix-stations and secure skateboard storage.

Does the institution have a "complete streets" or bicycle accommodation policy (or adhere to a local community policy) and/or have a continuous network of dedicated bicycle and pedestrian paths and lanes?:

Yes

A brief description of the bicycle/pedestrian policy and/or network:

Every street on the UC Irvine campus either has a bike lane or maintains low enough automobile speeds to make sharing the road comfortable for cyclists. UCI also has multiple miles of Class 1 bicycle facilities (off-street bike paths).

Does the institution have a bicycle-sharing program or participate in a local bicycle-sharing program?:

Yes

A brief description of the bicycle sharing program:

UC Irvine's ZotWheels program, managed by UCI Transportation and Distribution Services (T&DS), is a fully automated, networked bikeshare program, the first on any of the UC campuses and only the second at a university nationwide. The award-winning program, which has been in continuous operation since October 2009, has served more than 150 members and has been an integral component of UCI's bicycle programming success. ZotWheels offers 40 ports and 28 bicycles in four centrally located stations around the campus core and provides support for the University's sustainable transportation efforts. ZotWheels allows users to rent a bike from one location, ride it, and return it to any other station. Members are charged a membership fee of $40/year to cover the ongoing expenses of the program; any extra expense incurred is subsidized by T&DS.

Is the institution certified as a Bicycle Friendly University by the League of American Bicyclists (U.S.) or under a similar third party certification covering non-motorized transportation?:

Yes

A brief description of the certification, including date certified and level:

UC Irvine is a Silver level Bicycle Friendly University.

Does the institution offer free or reduced price transit passes and/or operate a free campus shuttle for commuters?:

Yes

A brief description of the mass transit program(s), (s), including availability, participation levels, and specifics about discounts or subsidies offered (including pre-tax options):

UC Irvine offers a "University Pass" membership, which provides unlimited boardings on the Orange County Transportation Authority's bus system's regular routes thereby reaching every city throughout Orange County. The cost for a University Pass is $169 for an annual membership (an 80% subsidy compared to monthly passes, paid for by UCI). The University Pass is available to all UCI students and

employees who forego a parking permit. (Employees can elect to have the cost of their University Pass deducted pre-tax). Annual University Pass boardings increased from 185,190 in the 2012-2013 year to 202,635 in the 2013-2014 year (a 9.4% increase). (

http://www.parking.uci.edu/AT/modes/OCTA.cfm

)

UCI's Anteater Express is free to use on the UCI campus and offers multiple off-campus routes for a small fee. The Anteater Express provides over 2 million shuttle rides per year.

As an added amenity, UCI provides round-trip transportation to the local airport and train station for the Thanksgiving, Winter, and Spring Recesses at no cost to the riders.

Does the institution offer a guaranteed return trip (GRT) program to regular users of alternative modes of transportation?:

Yes

A brief description of the GRT program:

All registered UCI Sustainable Transportation participants are eligible to receive Guaranteed Rides Home (aka guaranteed trips home) in case of illness or emergency.

Does the institution participate in a car/vanpool or ride sharing program and/or offer reduced parking fees or preferential parking for car/vanpoolers?:

Yes

A brief description of the carpool/vanpool program:

UCI promotes carpooling and vanpooling through its marketing campaigns, the Zimride rideshare matching site (

http://www.zimride.com/uci

), and by offering the incentive of complimentary occasional parking permits (valued at $336 for carpool, $672 for vanpool). Employees who team together in a four-person carpool can park for free. Nearly 10% of the UCI employee population commutes by carpool.

Nearly 10% of the UCI employee population commutes by carpool/vanpool.

Does the institution participate in a car sharing program, such as a commercial car-sharing program, one administered by the institution, or one administered by a regional organization?:

Yes

A brief description of the car sharing program:

UC Irvine has up to 17 Zipcars available on-campus in its carshare program. As of March 2014, UCI has approved 5,070 Zipcar members and an average 40% usage on the vehicles. On weekends, the usage jumps to over 50%.

Does the institution have one or more Level 2 or Level 3 electric vehicle recharging stations that are accessible to student and employee commuters?:

Yes

A brief description of the electric vehicle recharging stations:

UCI provides 8 Level 2 Coulomb chargers on the ChargePoint network for both public and employee/student charging at premium locations on campus. Via the Irvine Smart Grid Demonstration (ISGD) project, an additional 20 Level 2 charging stations are available for public and employe/student charging at a less-used parking structure on campus. The chargers associated with the ISGD are partially powered by photovoltaic cells.

Additionally, to combat range anxiety UC Irvine uses an EV rescue truck that charges stranded EVs on-campus as needed. The generator is powered by propane.

Does the institution offer a telecommuting program for employees as a matter of policy or as standard practice?:

Yes

A brief description of the telecommuting program:

UCI actively supported and promotes the telecommuting option (working from home or offsite) for UCI employees pending approval from supervisors and managers.

Does the institution offer a condensed work week option for employees as a matter of policy or as standard practice?:

Yes

A brief description of the condensed work week program:

UCI actively supports and promotes alternate work schedule options including the 3/36, 4/40, 9/80, modified 9/80, and 3/13:20.

Does the institution have incentives or programs to encourage employees to live close to campus?:

Yes

A brief description of the incentives or programs to encourage employees to live close to campus:

UC Irvine offers significant incentives to encourage employees to live within walking distance of the campus's academic core. UCI developed and operates the largest and most successful faculty/staff housing program in the United States. The Irvine Campus Housing Authority (ICHA) is a non-profit housing entity whose mission is focused on developing affordable faculty/staff housing opportunities for UCI affiliates. Through the development of for-sale and rental housing opportunities through ICHA and a University-sponsored mortgage program, approximately two-thirds of UCI faculty live on-campus within walking distance to their work.

Additionally, the Irvine Company (which manages nearly every apartment community in the City of Irvine), offers a $50/month discount on rent and a $99 move-in deal for all full-time UCI employees thus making it easier for UCI employees to live near the campus.

Does the institution have other incentives or programs to encourage more sustainable modes of transportation and reduce the impact of student and employee commuting?:

Yes

A brief description of other sustainable transportation initiatives and programs:

To reduce the "car-free" fear that sometimes accompanies the adoption of a sustainable mode, UC Irvine's Sustainable Transportation program provides for variable amounts of occasional use parking permits per month depending on the mode selected. For example, vanpool commuters are granted 4 daily permits per month and bicycle commuters are granted 5 daily permits per month.

UCI students, staff, and faculty traveling by train may submit their used 10-trip, 7-day, and 30-day train passes for a 20% rebate on the cost of the pass.

UCI hosts several major bike-focused encouragement events wherein students, staff, and faculty are educated about bicycle safety, rights, maintenance as well as taking part in used bike sales and tricycle races.

UCI runs annual helmet & bike light giveaways to facilitate safer riding and help students who could otherwise not afford the items.

UCI’s Transportation and Distribution Services teams up with the UCI Police Department via the Bicycle Education and Enforcement Program (BEEP) to provide bicycle education, policy enforcement, theft deterrence, and free bicycle registration for the UCI community.

UCI’s Bike Anti-Theft Instantaneous Tracking (BAIT) program uses GPS- and RFID-enabled bicycles to catch bike thieves on the UCI campus. The program has resulted in over 25 arrests and a marked decrease in the number of monthly bike thefts on campus.

UCI’s Sustainable Transportation program encourages and facilitates more sustainable commutes via custom commute planning, regular information sessions at major campus events, and tabling at all undergraduate, graduate orientations, international student orientations as well as all major staff-focused events.

The website URL where information about the institution’s sustainable transportation program(s) is available:

http://www.parking.uci.edu/AT/

Waste

This subcategory seeks to recognize institutions that are moving toward zero waste by reducing, reusing, recycling, and composting. These actions mitigate the need to extract virgin materials, such as trees and metals. It generally takes less energy and water to make a product with recycled material than with virgin resources. Reducing waste generation also reduces the flow of waste to incinerators and landfills which produce greenhouse gas emissions, can contaminate air and groundwater supplies, and tend to have disproportionate negative impacts on low-income communities. Waste reduction and diversion also save institutions costly landfill and hauling service fees. In addition, waste reduction campaigns can engage the entire campus community in contributing to a tangible sustainability goal.

Credit
Waste Minimization
Waste Diversion
Construction and Demolition Waste Diversion
Hazardous Waste Management

Waste Minimization

Responsible Party

Anne Krieghoff
Solid Waste and Recycling Manager
Facilities Management

Criteria

Part 1

Institution has implemented source reduction strategies to reduce the total amount of waste generated (materials diverted + materials disposed) per weighted campus user compared to a baseline.

Part 2

Institution's total annual waste generation (materials diverted and disposed) is less than the minimum performance threshold of 0.45 tons (0.41 tonnes) per weighted campus user.

This credit includes on-campus dining services operated by the institution or the institution's primary on-site contractor.

Total waste generation includes all materials that the institution discards, intends to discard or is required to discard (e.g. materials recycled, composted, donated, re-sold and disposed of as trash) except construction, demolition, electronic, hazardous, special (e.g. coal ash), universal and non-regulated chemical waste, which are covered in *OP 24: Construction and Demolition Waste Diversion* and *OP 25: Hazardous Waste Management.*

"---" *indicates that no data was submitted for this field*

Waste generated::

	Performance Year	Baseline Year
Materials recycled	3,887.27 *Tons*	961 *Tons*
Materials composted	2,845.40 *Tons*	2,258.80 *Tons*
Materials reused, donated or re-sold	400.90 *Tons*	0 *Tons*
Materials disposed in a solid waste landfill or incinerator	1,549.70 *Tons*	4,957.50 *Tons*

Figures needed to determine "Weighted Campus Users”::

	Performance Year	Baseline Year
Number of residential students	7,819	5,596
Number of residential employees	1,536	1,250
Number of in-patient hospital beds	0	0
Full-time equivalent enrollment	28,266	23,836
Full-time equivalent of employees	8,757	7,053
Full-time equivalent of distance education students	3,919	2,374

Start and end dates of the performance year and baseline year (or three-year periods):

	Start Date	End Date
Performance Year	July 1, 2013	June 30, 2014
Baseline Year	Jan. 1, 2005	Dec. 31, 2005

A brief description of when and why the waste generation baseline was adopted:

2005 is the first full year of data collected for the campus Recycle and Refuse program.

A brief description of any (non-food) waste audits employed by the institution:

Waste characterization studies as well as waste audits are performed at our campus buildings as part of our recycling program. This information is used to determine what items are still in the waste stream that could be diverted through recycling or composting, and the information is shared with the building staff to help educate them about how they can recycle more. Waste audits are also done as part of the LEED EBOM certification process. Waste characterizations are done at our transfer station to help us learn what items in our waste stream we need to highlight with our campus staff and students to either recycle or compost.

A brief description of any institutional procurement policies designed to prevent waste:

UC Irvine adheres to the University of California's Sustainable Practices Policy, which strives for the elimination of all materials sent to the landfill by 2020:

http://policy.ucop.edu/doc/3100155/Sustainable%20Practices

Following is language from the section on Environmentally Preferable Purchasing:
1. Environmentally preferable purchasing underlies and enables all other areas of sustainable practice in this Policy. Therefore, the University will maximize its procurement of environmentally preferable products and services.
2. The University will use its purchasing power to target environmentally preferable products and services for volume-discounted pricing to make them cost-competitive with conventional products and services.
3. For products and services without available environmentally preferable alternatives, the University will work with its existing and potential suppliers and leverage the University's purchasing power and market presence to develop sustainable choices.
4. The University will integrate sustainability requirements into its practices for competitive bidding in materiel and services procurement, allowing for suppliers that meet these requirements to earn additional evaluation points.
5. Packaging for all products procured by the University should be designed, produced, and managed in an environmentally sustainable manner. The University shall seek products that have take-back programs, as appropriate.
6. When requested, suppliers citing environmentally preferable purchasing claims shall provide proper certification or detailed information on environmental claims, including benefits, durability, and take-back, reuse, and recyclable properties. Additionally, suppliers are responsible for providing proof of University of California-accepted third-party certification based upon the requirements of the University's Procurement Services Department located in the Office of the President.
7. The goal of this section G shall be applied within the constraints of research needs and budgetary requirements and in compliance with applicable rules, regulations and laws.

A brief description of any surplus department or formal office supplies exchange program that facilitates reuse of materials:

UC Irvine maintains Peter's Exchange, which facilitates the salvage of quality goods for re-use by other areas of the campus and the community. The campus diverts goods from the landfill and extends their useful life by finding new users for these products. When goods cannot be re-used, the campus looks to recycle where applicable.

A brief description of the institution's efforts to make materials available online by default rather than printing them:

As of the 2011-2012 academic year, UC Irvine no longer publishes a printed catalogue. UC Irvine's Schedule of Classes has been exclusively online since 2004. For more information, see

http://www.reg.uci.edu

.

A brief description of any limits on paper and ink consumption employed by the institution:

The central campus pay printing service limits printing by imposing a $0.10/page charge. This service is provided in UCI Libraries and centrally managed computing labs. Some schools and departments provide some printing to their students on specially located printers.

A brief description of any programs employed by the institution to reduce residence hall move-in/move-out waste:

UCI has an annual student move-out donation and recycle program each June. The 2013 Move-Out Donation Throwdown program was a two-week-long campaign to raise awareness that reuse is just as important as recycling. The housing and recycling team, in collaboration with the Goodwill of Orange County, places collection carts inside all dorms and community centers for the six student housing communities (~14,000 people), and these are emptied every other day. Additional recycle bins are placed outside the buildings and emptied daily to encourage recycling for things that cannot be donated. Each housing community posts an e-flyer on its website that describes the program and the locations for the collection carts and recycling bins. The Move Out donation event is advertised on the campus electronic billboards and in the campus newspaper, New University. The event is approached as a competition with the goal of exceeding the prior year's donations. The Move Out Donation Throwdown program has gained success every year. In 2010, the first program collected 67 tons; the 2014 program resulted in 82 tons of clothing, furniture and electronics being donated to Salvation Army.

Our move-in program starts before the students arrive on campus. Through the new student move-in program students are encouraged to reduce waste prior to coming on campus by reducing overpackaging prior to arrival. We also teach about campus recycle practices at this time. During move-in additional cardboard collection bins are placed in dorm areas for the collection of these used move in boxes.

A brief description of any other (non-food) waste minimization strategies employed by the institution:

During our campus recycling presentations to students and staff, reduce and re-use is highlighted as preferable to recycling. Some of the ways we put that into action is through the use of the 140 hydration water bottle filling stations available on campus and in student housing to fill reusable bottles. Since 2010 the refillable water bottle filling stations have been credited with the reduction of disposable bottle sales by 30%. Each year these campus bottle filling stations provide more than 167,994 gallons of water, eliminating the use of 1.34 million disposable bottles (equal to 37 tons of plastic waste avoided). Another way the campus encourages waste minimization is by requesting that documents be printed only when necessary. In addition, campus copy machines are set to the default of double sided printing to reduce paper use and waste.

A brief description of any food waste audits employed by the institution:

Food waste audits are done to ensure that an uncontaminated food waste stream is provided. Informal inspections are done at each of the kitchen areas, and more formal audits are done at the Waste Management food waste plant where UCI food waste is processed. The UCI Hospitality & Dining Sustainability Coordinator and Sustainability Field Study Interns conduct regular waste audits at campus dining locations to prevent waste stream contamination and continually educate both employees and customers about waste diversion

A brief description of any programs and/or practices to track and reduce pre-consumer food waste in the form of kitchen food waste, prep waste and spoilage:

All pre-consumer food waste is weighed, and food management tools are used to track and address excessive pre-consumer food waste. All campus dining commons and 14 campus restaurants have a pre-consumer food waste collection program. In the kitchens, all pre-consumer food waste is placed into a clear container prior to being added to the campus food composting program. The clear bin is weighed and logged. The dining manager looks at the clear container to determine if the waste could have been minimized. The dining manager coaches the crew on ways to minimize food waste for the future. This technique has helped to reduce food waste. The pre-consumer food waste is then added to the campus food composting program. Each dining facility has an outside bin dedicated to the collection of this material. In 2014 the campus food composting program was responsible for keeping 574 tons of food scaps out of landfills.

A brief description of programs and/or practices to track and reduce post-consumer food waste:

Trays have been eliminated in all dining locations except for use by students who have physical disabilities; trays are available to this group on request. The trayless system reduces waste by encouraging students to take only the food they can hold on one plate and to come back if they want more. Tastings and half portions are encouraged so the students can see if they like the food item before selecting a full portion.

Weigh the Waste is a bi-quarterly event held in the on-campus dining commons. The purpose of the event is to educate students about the environmental impact of food waste and to empower the students about how they can alter the footprint they leave behind. Students can see directly how much food is wasted in a single meal period. Green Captains also provide students with simple tips to reduce food waste and celebrate successes when students come to the bins with no waste.
Starting in 2012-2013, UCI Hospitality & Dining held a series of Guess the Waste activities alongside the Weigh the Waste events to engage more students in thinking about how much waste there is and the factors that contribute to creating waste.
In October 2013, UCI Hospitality & Dining introduced the Beat the Waste Competition. Students at Mesa and Pippin Commons can win a bonus themed meal by keeping the waste below 1.41 oz./person by the start of Spring Quarter 2014.
The Weigh the Waste program has seen significant decreases in waste both over the course of the year. In Fall 2012, average waste per person at the start of the year was 2.17oz. Average waste per person was 1.41oz by Spring 2013. In Fall 2013, average waste per person was 1.7oz. Average waste per person, last measured in January 2014, is currently 1.65 oz.

In 2013 the first pilot program for a post-consumer food waste program was completed at our Phoenix Grill dining facility. The program consists of a three-bin system for compost, commingled recycling and landfill material. The bins are in both the inside and outside dining area. The bin signs are all in images and at eye level. The program was so succesful that Phoenix Grill is now a certified Zero Waste Facility. We have plans to extend this same program at other campus dining facilities next quarter.

In 2013, seven large-scale campus events were conducted as Zero Waste Events. Each event had over 3,500 people in attendance with food and beverages served. Using the three bin and student volunteers know as "trash talkers" who stand by the bins and help attendees place items in the correct bins as well as answer questions about the campus recycle program. Each event achieved a 90% or better diversion rate

A brief description of the institution's provision of reusable and/or third party certified compostable to-go containers for to-go food and beverage items (in conjunction with a composting program):

Reusable to-go containers are sold at cost at all of the residential dining locations and can be used at all food locations on campus. In addition, these containers were given to many of our incoming freshman. In total, more than 3,000 students now have reusable to-go containers and are using them. Reusable to-go containers are dropped off for cleaning by our students at all residential dining locations. Any leftover food in the container is deposited in the food waste bins. Students returning containers are reissued a clean container. This is a hugely successful program. Annually, more than 200,000 disposable to-go containers have been eliminated. To-go containers at Organic Greens to Go are made using recycled content. All to-go containers at other campus dining locations on campus are biodegradable.

A brief description of the institution's provision of reusable service ware for “dine in” meals and reusable and/or third party certified compostable service ware for to-go meals (in conjunction with a composting program):

UCI Hospitality & Dining offers a Reusable To-Go Program, which allows students to take meals to-go in a reusable to-go container. Students can then exchange the used container for a clean one at any time or exchange it for a Rain Check card for convenience. All dine-in service ware and plate ware is reusable.

A brief description of any discounts offered to customers who use reusable containers (e.g. mugs) instead of

disposable or compostable containers in to-go food service operations:

Over the last three years, more than 7,500 reusable water bottles were distributed to first-year freshman for re-use in our dining locations.

UCI Hospitality & Dining offers a discount with the use of reusable cups, mugs, bottles, etc. This discount is available for coffee and fountain drinks on campus at locations that offer those beverages. Java City: Customers pay only $1.49 for coffee when they bring their own 20 oz. or less sized mug/cup (good at all locations) and receive a 10-cent discount on espresso-crafted beverages (at Cyber A ecoGrounds and Java City Kiosk). Einstein Bros Bagels: Customers pay only $1,49 for coffee when refilling 16 oz. or 20 oz. cups. Starbucks: Customers get a 10 cent discount when they bring their own mugs.

A brief description of other dining services waste minimization programs and initiatives:

Receiptless transactions are implemented at campus dining locations, with receipts available only upon request or where a signature is needed.

Food management tools allow UCI Hospitality & Dining to prevent 15% of food waste through source reduction.

The Weigh the Waste program has also helped year-to-year waste minimization through better education of employees and managers about portioning and food purchasing.

UCI Hospitality & Dining diverted 96 tons of food waste in 2014 through source reduction by purchase, storage and handling and 17 tons of food waste by avoiding over-preparation and plate waste.

The website URL where information about the institution's waste minimization initiatives is available:

http://www.fm.uci.edu/units/recyling_refuse.html

Waste Diversion

Responsible Party

Anne Krieghoff
Solid Waste and Recycling Manager
Facilities Management

Criteria

Institution diverts materials from the landfill or incinerator by recycling, composting, reusing, donating, or re-selling.

This credit includes on-campus dining services operated by the institution or the institution's primary on-site contractor.

This credit does not include construction, demolition, electronic, hazardous, special (e.g. coal ash), universal and non-regulated chemical waste, which are covered in *OP 24: Construction and Demolition Waste Diversion* and *OP 25: Hazardous Waste Management*.

"---" *indicates that no data was submitted for this field*

Materials diverted from the solid waste landfill or incinerator:

8,188 *Tons*

Materials disposed in a solid waste landfill or incinerator :

1,633 *Tons*

A brief description of programs, policies, infrastructure investments, outreach efforts, and/or other factors that contributed to the diversion rate, including efforts made during the previous three years:

UC Irvine has a robust recycling and composting program that resulted in an 83% diversion rate for 2014. Every year since 2005, the campus has been able to reduce the amount of material it sends to landfill. In 2014, UCI sent only 17% to landfill. Since 2008 UCI has continued to decrease the amount of waste to landfill. The campus recycles more than 22 commodities using a source-separation program for metal, wood, paper, pallets, cardboard, and recyclable beverage containers collected for their redemption value in the state of California. Every campus office and building has a paper and cardboard recycle program. All classrooms, laboratory buildings, pedestrian pathways, and student housing have a commingled recycle program in addition to the paper and cardboard recycle program. The commingled recycle program was started in 2009 in UC Irvine's housing communities and expanded during 2012 to include laboratory buildings, campus restaurants, and classrooms. In the first year, 205 tons were diverted; the commingled program continues to grow and resulted in diverting 851 tons of recyclables in 2014. This program recycles all plastics, glass, paper, and metal using a two-bin system.

UCI has food composting in all three of its dining commons and at 14 campus restaurants. The food composting program started in 2010 and collected 96 tons. The food composting program continues to grow collecting 517 tons in 2013. UC Irvine was commended by the EPA for our food program and in 2013 received a visit from Bob Perciasepe, the second in command at the Washington DC Headquarters of the EPA. All three of UC Irvine's dining commons -- Mesa, Pippin, and Brandywine -- operate full time at Zero Waste. They are among five buildings on campus that are certified Zero Waste due to their 95% or higher diversion rate. The Anteater Recreation Center and the Newkirk Alumni House and Conference Center are the newest facilities to operate with zero waste. UCI composts 100% of its

green waste in a collaborative effort with a local off-site facility using traditional windrow composting. Campus food waste and animal bedding materials are sent to a local processing plan that converts the material into slurry. The slurry is transported to the local water treatment plant's anaerobic digester. The resulting methane gas is converted to energy that powers the water treatment plant. Some recyclable material still finds its way into the waste stream; UCI delivers all non-recycled waste material to a local material recovery facility, which reclaims additional recyclables before the remainder goes to landfill.

UCI's Solid Waste and Recycle team consists of 15 full-time employees and a fleet of 11 vehicles including electric and biodiesel fuel vehicles. The campus self-hauls all of its solid waste and recycling to ensure that it makes the greenest diversion choice for each commodity. The recycle team received monthly training and the custodial team receives annual training in recycling. UCI also teaches about recycling through 15-plus presentations and workshops and 10 large-scale Zero Waste events held each year; these are geared toward staff, students, and visitors. UCI invites other colleges to visit and learn best demonstrated practices from its recycling program and, in turn, learns from visitors. The university hosted its first Sustainability Forum, "Creating a Culture of Environmental Stewardship," targeted toward K-12 and higher education institution educators in 2012. In addition, UCI has 12-14 unpaid student interns working with the recycle team each year, doing resume-worthy projects and earning four college units for each 100 hours worked.

UC Irvine was awarded the "Zero Waste Achievement Award" by the California Resource Recovery Asssociation in 2013. Zero waste is within UCI's grasp, and the campus should meet this goal before the UC established deadline of 2020.

A brief description of any food donation programs employed by the institution:

UCI Dining works with The Food Donation Connection Network to donate excess, unserved foods to the local community. To ensure that a sustainable balance is made between preparing just the right amount of food and having a minimal amount left over, our knowledgeable food service managers forecast the amount of diners expected for each meal service. This estimate is based on dining traffic and food consumption trends.

A brief description of any pre-consumer food waste composting program employed by the institution:

All campus dining commons and 14 campus restaurants have a pre-consumer food waste collection program. In the kitchens all pre-consumer food waste is placed in a food collection bin and added to the campus food composting program. Each dining facility has a bin dedicated for the collection of this material. In 2014 the campus food composting program was responsible for keeping 574 tons of food scraps out of the landfill.

A brief description of any post-consumer food waste composting program employed by the institution:

The post-consumer food waste pilot program at Phoenix Grill was performed over a six-month period and completed in December 2013. The program uses a three-bin system (compost, recycle & landfill) both inside and outside, adjacent to the seating area. Bin signs utilize images and are placed at eye level. The Phoenix Grill pilot was so successfull that Phoenix Gill was awarded Zero Waste Certification because it operates full time at a 95% or higher diversion rate. The post-consumer food-waste program is also currently in place at BC Cavern Food Court.

Does the institution include the following materials in its waste diversion efforts?:

	Yes or No

Paper, plastics, glass, metals, and other recyclable containers	Yes
Food donations	Yes
Food for animals	No
Food composting	Yes
Cooking oil	Yes
Plant materials composting	Yes
Animal bedding composting	Yes
Batteries	Yes
Light bulbs	Yes
Toner/ink-jet cartridges	Yes
White goods (i.e. appliances)	Yes
Laboratory equipment	Yes
Furniture	Yes
Residence hall move-in/move-out waste	Yes
Scrap metal	Yes
Pallets	Yes
Motor oil	Yes
Tires	Yes

Other materials that the institution includes in its waste diversion efforts:

Carpet recycling is also included in our waste diversion. As part of our purchase agreement, carpet recycling is a requirement. The vendor must provide documentation demonstrating that any carpet removed is recycled. In 2014, 84.3 tons of carpet were recycled.

Construction and Demolition Waste Diversion

Responsible Party

Anne Krieghoff
Solid Waste and Recycling Manager
Facilities Management

Criteria

Institution diverts non-hazardous construction and demolition waste from the landfill and/or incinerator.

Soil and organic debris from excavating or clearing the site do not count for this credit.

"---" *indicates that no data was submitted for this field*

Construction and demolition materials recycled, donated, or otherwise recovered:

13,921.23 *Tons*

Construction and demolition materials landfilled or incinerated :

63.31 *Tons*

A brief description of programs, policies, infrastructure investments, outreach efforts, and/or other factors that contributed to the diversion rate for construction and demolition waste:

UC Irvine had a diversion rate of 99% for construction and demolition (C&D) waste for the performance year. This includes waste generated by small construction and renovation projects and waste from major capital improvement building projects.

On small construction and renovation projects, UCI actively collects all C&D materials generated using 20 cubic yard lowboy containers and 40 cubic yard bins at the job site. A system of source separation is used for concrete, asphalt and metals. For mixed construction debris all material is taken to a transfer station with a C&D material recovery facility (MRF) that provides an average diversion rate of 70-75% for C&D material. All materials not recycled (the remaining 25-30%) are accounted for in the campus Mixed Solid Waste total.

In addition, campus renovation and maintenance projects are provided use of 40-yard metal collection bins for the recycling of all metal from renovation and plumbing jobs to ensure that all C&D jobs have free and easy access to source separation and collection of this material. For the collection and recycling of all other C&D jobs on campus, UC Irvine works in partnership with a local vendor that provides C&D MRF services to on-campus contractors at a low cost and a guaranteed a diversion rate of 70% or higher, ensuring that all contractors working on campus have a cost-effective means of recycling construction waste at these high diversion rates.

All major capital improvement construction projects on campus divert a minimum of 75% of construction and demolition waste as part of UC Irvine’s campuswide green building program. UCI projects are required to meet a minimum level of LEED Silver certification and compliance includes a LEED Credit requirement to divert a minimum of 75% of construction and demolition waste. LEED accredited construction staff monitor C&D waste generation and recovery and maintain documentation to confirm waste diversion compliance.

UCI uses Hot In-Place Asphalt replacement program instead of the traditional asphalt removal and replacement. In 2014 we used this process to resurface 599,440 cubic feet of asphalt. (

https://www.youtube.com/watch?v=mf88DU3omfg

) With specialized equipment we are able to use the existing asphalt by melting the damaged asphalt and resurfacing the road. This eliminates trucking of used asphalt and recycles the asphalt to be used in the new road surface replacement.

Hazardous Waste Management

Responsible Party

Kathy Haq
Manager of Special Projects
Administrative and Business Services

Criteria

Part 1

Institution has strategies in place to safely dispose of all hazardous, special (e.g. coal ash), universal, and non-regulated chemical waste and seeks to minimize the presence of these materials on campus.

Part 2

Institution has a program in place to recycle, reuse, and/or refurbish electronic waste generated by the institution and/or its students. Institution takes measures to ensure that the electronic waste is recycled responsibly, for example by using a recycler certified under the e-Stewards and/or R2 standards.

Submission Note:

Hazardous Waste and Electronic Waste are managed by different organizations on our campus. The responses to this credit were provided by:

HAZARDOUS WASTE
Kirk Matin
Environmental/Hazardous Waste Manager
Environmental Health & Safety
(949) 824-4578

kmatin@uci.edu

ELECTRONIC WASTE
Pete Shore
UC Irvine Equipment Management Department
Surplus Sales and Equipment Management
(949) 824-6519

wshore@uci.edu

"---" *indicates that no data was submitted for this field*

Does the institution have strategies in place to safely dispose of all hazardous, special (e.g. coal ash), universal, and non-regulated chemical waste and seek to minimize the presence of these materials on campus?:

Yes

A brief description of steps taken to reduce hazardous, special (e.g. coal ash), universal, and non-regulated chemical waste:

UC Irvine believes that waste minimization is the cornerstone of pollution prevention. By establishing waste minimization guidelines and providing effective hazardous waste training, waste generators are able to:

• Make effective purchasing decisions
• Implement and develop resource efficient procedures
• Scale down experiments
• Utilize less hazardous chemicals

UC Irvine has also established guidelines for the sale and transfer of surplus materials including electronics. Through this program, the University's resources can be more efficiently used, thereby minimizing the need for electronic waste disposal.

For more information on waste minimization please visit

http://www.ehs.uci.edu/programs/enviro/wasteminimization.html

A brief description of how the institution safely disposes of hazardous, universal, and non-regulated chemical waste:

UC Irvine performs stringent audits to approve all hazardous and universal waste disposal facilities. These rigorous audits include reviews of:

• Facility Operations
• Waste Analysis
• Manifest System
• Waste Management
• Personnel Safety
• Regulatory Compliance History
• Inspection Records
• Financial Stability
• Liability Insurance
• Security

A brief description of any significant hazardous material release incidents during the previous three years, including volume, impact and response/remediation:

There have been no significant hazardous material release incidents.

A brief description of any inventory system employed by the institution to facilitate the reuse or redistribution of laboratory chemicals:

UC Irvine has a robust chemical inventory system that allows users to designate chemicals as “surplus.” Surplus chemicals can be used and redistributed to others who need the chemicals.

UCI’s Chemical Inventory, Biological and Radio-isotope Tracking System (CiBR-Trac)

http://ucirvine.ecompliance.net/index.jsp

Does the institution have or participate in a program to responsibly recycle, reuse, and/or refurbish all electronic waste generated by the institution?:

Yes

Does the institution have or participate in a program to responsibly recycle, reuse, and/or refurbish electronic waste generated by students?:

Yes

A brief description of the electronic waste recycling program(s):

The Equipment Management Department through Peter’s Exchange Surplus Sales conducts a program for free pickup of surplus property including any equipment and electronic waste. This program is available to all departments on campus. All items are brought to our north campus location, sorted and processed either for sale or recycle. Some items still in working condition are sold back to campus departments or to outside interests, some are sold for parts, and some are recycled. This program is designed to keep electronic waste out of the waste stream (Reuse, Repurpose, Recycle).

See:

http://snap.uci.edu/viewXmlFile.jsp?cmsUri=public/Purchasing/EquipmentManagement/ChecklistSelli

ngExcessProperty.xml

We do have a partial program for recycling electronic waste generated by students (in the housing areas). We have electronic waste bins at Verano and Mesa Court which students can use. We periodically empty these bins and bring items to our north campus location. Palo Verde has a drop-off location that students can use; Palo Verde staff accumulate student items left there and bring them to us periodically at our facility.

A brief description of steps taken to ensure that e-waste is recycled responsibly, workers’ basic safety is protected, and environmental standards are met:

UCI contracts with Electronic Recyclers International, Inc., which is e-Stewards Certified and R2 Certified by Sustainable Electronics Recycling International.

UCI also uses California-based Extreme Recycling, Inc., which is e-Stewards Certified.

The website URL where information about the institution's hazardous and electronic-waste recycling programs is available:

http://www.ehs.uci.edu/programs/enviro/wasteminimization.html

Water

This subcategory seeks to recognize institutions that are conserving water, making efforts to protect water quality and treating water as a resource rather than a waste product. Pumping, delivering, and treating water is a major driver of energy consumption, so institutions can help reduce energy use and the greenhouse gas emissions associated with energy generation by conserving water. Likewise, conservation, water recycling and reuse, and effective rainwater management practices are important in maintaining and protecting finite groundwater supplies. Water conservation and effective rainwater and wastewater management also reduce the need for effluent discharge into local surface water supplies, which helps improve the health of local water ecosystems.

Credit
Water Use
Rainwater Management
Wastewater Management

Water Use

Responsible Party

Richard Demerjian
Director
Office of Environmental Planning and Sustainability

Criteria

Part 1

Institution has reduced its potable water use per weighted campus user compared to a baseline.

Part 2

Institution has reduced its potable water use per gross square foot/metre of floor area compared to a baseline.

Part 3

Institution has reduced its total water use (potable + non-potable) per acre/hectare of vegetated grounds compared to a baseline.

Submission Note:

UC Irvine's water conservation initiatives have significantly reduced per captia water use on campus over the past decade. Using the recently adopted UCI Water Action Plan as a roadmap, the campus is pursuing a range of initiatives including education, outreach, management practices, and projects to achieve an aggressive 30% additional water use reduction by year 2020.

"---" *indicates that no data was submitted for this field*

Level of water risk for the institution’s main campus:

High

Total water use::

	Performance Year	Baseline Year
Total water use	641,316,903 *Gallons*	690,503,484 *Gallons*

Potable water use::

	Performance Year	Baseline Year

Potable water use	410,564,571 *Gallons*	500,000,000 *Gallons*

Figures needed to determine "Weighted Campus Users"::

	Performance Year	Baseline Year
Number of residential students	7,740	4,596
Number of residential employees	0	0
Number of in-patient hospital beds	0	0
Full-time equivalent enrollment	28,602	26,840
Full-time equivalent of employees	7,820	7,380
Full-time equivalent of distance education students	3,919	2,374

Gross floor area of building space::

	Performance Year	Baseline Year
Gross floor area	10,766,160 *Square Feet*	8,827,965 *Square Feet*

Area of vegetated grounds::

	Performance Year	Baseline Year
Vegetated grounds	230.65 *Acres*	234.15 *Acres*

Start and end dates of the performance year and baseline year (or three-year periods):

	Start Date	End Date
Performance Year	July 1, 2013	June 30, 2014
Baseline Year	July 1, 2004	June 30, 2007

A brief description of when and why the water use baseline was adopted:

UC Irvine's water use baseline (3 year average for fiscal years 2005-2007) was established in the UCI 2013 Water Action Plan based on University of California Sustainable Practices Policy guidelines.

Water recycled/reused on campus, performance year:

Recycled/reused water withdrawn from off-campus sources, performance year:

230,752,333 *Gallons*

A brief description of any water recovery and reuse systems employed by the institution:

Reclaimed water (tertiary treated blackwater) has been used for landscape irrigation on campus for over 40 years. UCI works collaboratively with the Irvine Ranch Water District (IRWD), a pioneer in treating wastewater for reuse for agriculture and landscape irrigation. UC Irvine's blackwater is locally treated one half mile away from campus at the IRWD Michelson Treatment Plant. Through IRWD the campus reclaims approximately 34% of blackwater produced on campus for landscape irrigation resulting in the conservation of over 230 million gallons per year of potable water supply.

A brief description of any water metering and management systems employed by the institution:

Both potable and reclaimed water used on campus is metered, monitored, and analyzed by campus facilities staff and UCI's Water Resources Working Group as part of tracking and monitoring of Water Action Plan implementation and progress. Landscape irrigation is managed using a weather based control system to match application rates to current evapotranspiration and rainfall data.

A brief description of any building retrofit practices employed by the institution, e.g. to install high efficiency plumbing fixtures and fittings:

UCI has completed a phase 1 of an extensive campuswide plumbing retrofit program, replacing all pre-1994 plumbing fixtures (toilets and urinals) with high efficiency fixtures. Phase 1 has resulted in annual savings of 14.8 million gallons per year. The next phase of this program will involve replacement of targeted post-1994 fixtures (urinals with gpf greater than 1, toilets with 1.28-1.6 gpf, and faucets with gpm exceeding 0.5 gpm) which will result in an additional 10.6 million gallons per year in savings.

A brief description of any policies or programs employed by the institution to replace appliances, equipment and systems with water-efficient alternatives:

As part of the UC Sustainability Policy, UC Irvine focuses its procurement of appliances and equipment to be Energy Star rated or WaterSense certified.

A brief description of any water-efficient landscape design practices employed by the institution (e.g. xeriscaping):

A key goal of UC Irvine's campus landscape management plan, the 1995 Green and Gold Plan, is to "develop a landscape that is sustainable and provides for long-term conservation of resources: energy, water, labor, and reduced production of green waste." In support of this goal, the plan specifies the use of native and other environmentally suitable, low water use plant materials and irrigation water use efficiency. This sustainable landscape program has guided campuswide landscape planning, design, implementation, and

maintenance over the past 20 years.

As an example, a recent demonstration project involved the conversion of a turf area in a high visibility area (adjacent to the campus administration building) into a low water use California native woodland garden . The garden replaced a large area of water intensive turf, reducing irrigation significantly and providing a demonstration project for the campus community. Follow up projects including a high visibility location with a student housing community will be implemented as a turf replacement native garden project May 2013. This area will be planted with native water wise plants for demonstration and outreach to students, campus community, and visitors as a sustainable alternative to turf.

A brief description of any weather-informed irrigation technologies employed by the institution:

UC Irvine uses a central control system (Rainbird Maxicom) in conjunction with a weather station on campus. The central control system adjusts irrigation needs based on monitoring of evapotranspiration data and rainfall data.

A brief description of other water conservation and efficiency strategies employed by the institution:

As part of the UC Irvine Water Action Plan opportunities for improved efficiency and conservation include the following:
1. Community engagement, education and outreach
2. Plumbing fixture retrofit program Phase II
3. Improved leak notification and response
4. Condensate recovery and reuse in landscaping or fountains
5. Stormwater capture and reuse
6. Turf removal and native landscaping
7. Irrigation system improvements

The website URL where information about the institution's water conservation and efficiency initiatives is available:

http://www.sustainability.uci.edu/SustainableCampus/Water.html

Rainwater Management

Responsible Party

Richard Demerjian
Director
Office of Environmental Planning and Sustainability

Criteria

Part 1

Institution uses Low Impact Development (LID) practices as a matter of policy or standard practice to reduce rainwater/stormwater runoff volume and improve outgoing water quality for new construction, major renovation, and other projects that increase paved surface area on campus or otherwise significantly change the campus grounds.

The policy, plan, and/or strategies cover the entire campus. While the specific strategies or practices adopted may vary depending on project type and location, this credit is reserved for institutions that mitigate rainwater runoff impacts consistently during new construction. Implementing a strategy or strategies for only one new development project is not sufficient for Part 1 of this credit.

Part 2

Institution has adopted a rainwater/stormwater management policy, plan, and/or strategies that mitigate the rainwater runoff impacts of ongoing campus operations and treat rainwater as a resource rather than as a waste product.

The policy, plan, and/or strategies address both the quantity and quality (or contamination level) of rainwater runoff through the use of green infrastructure. Though specific practices adopted may vary across the campus, the policy, plan, and/or strategies cover the entire institution. Implementing strategies for only one building or area of campus is not sufficient for Part 2 of this credit.

Policies adopted by entities of which the institution is part (e.g. state government or the university system) may count for both parts of this credit as long as the policies apply to and are followed by the institution.

Submission Note:

The UCI Water Action Plan, Long Range Development Plan, Storm Water Management Plan, and Implementation Strategies for Erosion Control and Landscape Management documents provide goals and strategies for the long term management of rainwater. Low Impact Development techniques have been adopted for new construction projects as well as the on-going operations of campus.

"---" *indicates that no data was submitted for this field*

Does the institution use Low Impact Development (LID) practices as a matter of policy or standard practice to reduce rainwater/stormwater runoff volume and improve outgoing water quality for new construction, major renovation, and other projects?:

Yes

A brief description of the institution's Low Impact Development (LID) practices:

Low Impact Development (LID) has become an accepted standard practice on campus. LID principles have been employed in the past with the most recent development of student housing, Verano 7 Apartments, utilizing a variety of practices including bioretention basins, bio-swales, permeable paving, and sand filter beds to capture and treat runoff. The 2013 UCI Water Action Plan identifies LID as a standard practice for both new construction projects and stormwater treatment associated with ongoing operations.

As part of the campus as a living laboratory for sustainability, UCI environmental engineering students are engaged in the planning and design of a vegetated swale as a demonstration and research project for low energy intensive stormwater treatment on three site locations within the campus core.

Has the institution adopted a rainwater/stormwater management policy, plan, or strategies that mitigate the rainwater runoff impacts of ongoing campus operations through the use of green infrastructure? :

Yes

A brief description of the institution's rainwater/stormwater management policy, plan, and/or strategies for ongoing campus operations:

UC Irvine's ongoing operations are managed under the 2003 Storm Water Master Plan. The plan provides best management practices (BMP's) for reducing discharge of contaminants into the storm drain system. The SWMP (1) identifies pollutant sources potentially affecting the quality and quantity of stormwater discharges; (2) provides Best Management Practices (BMPs) for municipal and small construction activities implemented by UC Irvine staff and contractors and; (3) provides measurable goals for the implementation of this SWMP to reduce the discharge of the identified pollutants into the storm drain system and associated water ways. In addition to the link shown below, see

http://www.ehs.uci.edu/programs/enviro/stormwater/Stormwater_Guide.pdf

and

http://www.ehs.uci.edu/programs/enviro/cleanwaterprog.html

The Implementation Procedures for Erosion Control and Landscape Management also outlines procedures for ongoing site erosion control and major rainfall events.

The 2013 UCI Water Action Plan identifies goals and strategies for stormwater management on campus including the adoption of LID as standard practice, onsite retention, vegetated swales, rain cisterns and permeable paving, building from and supporting the management policies and strategies identified in the SWMP.

A brief description of any rainwater harvesting employed by the institution:

To date, UC Irvine's water resources programs have focused on capture, retention, treatment, and percolation/infiltration of rainwater in support of water quality, watershed and habitat management goals. UC Irvine does not currently harvest, treat, and store rainwater for reuse on campus.

Rainwater harvested directly and stored/used by the institution, performance year:

0 *Gallons*

A brief description of any rainwater filtering systems employed by the institution to treat water prior to release:

UC Irvine employs a variety of systems to treat rainwater including including vegetated swales, sand filter beds, percolation galleries, bio retention basins, and treatment marshes as well as vaults with separators.

A brief description of any living or vegetated roofs on campus:

Because of the energy intensity and increased water use associated with management of vegetated roofs in a Mediterranean climate zone (warm dry summers/cool rainy winters) UC Irvine has elected to utilize cool roofs and/or rooftop solar panels in lieu of vegetated roofs, which in combination with ground-based LID water quality elements reduce the urban heat island effect, provide on-site renewable energy opportunities, and achieve campus water resource management goals.

A brief description of any porous (i.e. permeable) paving employed by the institution:

Permeable paving has been used in select areas on campus that are geotechnically suitable for infiltration. Clay soils, which do not allow for adequate infiltration, exist throughout many areas of the campus which limit opportunities to use permeable paving.

As an example of use, permeable paving in the parking lot of Verano 7, a graduate housing community, includes a sand filter underneath which collects runoff from adjacent impervious areas to remove contaminants and allow for infiltration of low volume first flush runoff before entering a drain pipe connected to the storm drain network.

A brief description of any downspout disconnection employed by the institution:

No existing building downspouts have been disconnected. Verano 7 downspouts direct runoff from rooftops to sand filter beds for treatment before entering the storm drain system.

A brief description of any rain gardens on campus:

The LEED Platinum rated Verano 7 student housing area has multiple rain gardens treating stormwater collected from the rooftops. The rain gardens employ an 18" sand bed that filters, treats, and stores rainwater before entering the storm drain network.

A brief description of any stormwater retention and/or detention ponds employed by the institution:

Multiple detention basins are located across campus to treat stormwater through settling of total suspended solids (TSS) and biological uptake of contaminants by wetland vegetation.

A brief description of any bioswales on campus (vegetated, compost or stone):

The campus has a number of vegetated bioswales treating runoff from parking lots, roadways, and residential areas. As an example the bioswales at Verano 7 consist of 18" of sand and 2.5' minimum filter bed soil. The Vista del Campo Norte Student Apartment and Palo Verde 2 Student Apartment projects employ linear vegetated bioswales to treat parking lot runoff prior to entering downstream treatment wetland systems.

A brief description of any other rainwater management technologies or strategies employed by the institution:

At the master planning level, the UCI Long Range Development Plan identifies preservation and enhancement of the natural arroyos (season drainage features) that occur on the 1,500 acre campus site as part of campuswide rainawater management strategies with the stormwater management plan and LRDP open space element. These arroyos are enhanced through restoration with native riparian plant species and low-impact development features such as stone checkdams to and support bank protection and seasonal water flows. These enhanced streambeds serve important functions as riparian habitat for native species, rainwater management, and recreational corridors to serve the campus community.

The website URL where information about the institution's rainwater management initiatives, plan or policy is available:

http://www.sustainability.uci.edu/SustainableCampus/WaterActionPlan.pdf

Wastewater Management

Criteria

Institution’s wastewater is handled naturally on campus or in the local community. Natural wastewater systems include, but are not limited to, constructed treatment wetlands and Living Machines. To count, wastewater must be treated to secondary or tertiary standards prior to release to water bodies.

This credit recognizes natural handling of the water discharged by the institution. On-site recycling/reuse of greywater and/or blackwater is recognized in *OP 26: Water Use*.

This credit was marked as **Not Pursuing** so Reporting Fields will not be displayed.

Planning & Administration

Coordination, Planning & Governance

This subcategory seeks to recognize colleges and universities that are institutionalizing sustainability by dedicating resources to sustainability coordination, developing plans to move toward sustainability, and engaging students, staff and faculty in governance. Staff and other resources help an institution organize, implement, and publicize sustainability initiatives. These resources provide the infrastructure that fosters sustainability within an institution. Sustainability planning affords an institution the opportunity to clarify its vision of a sustainable future, establish priorities and help guide budgeting and decision making. Strategic planning and internal stakeholder engagement in governance are important steps in making sustainability a campus priority and may help advocates implement changes to achieve sustainability goals.

Credit
Sustainability Coordination
Sustainability Planning
Governance

Sustainability Coordination

Responsible Party

Richard Demerjian
Director
Office of Environmental Planning and Sustainability

Criteria

Institution has at least one sustainability committee, office, and/or officer tasked by the administration or board of trustees to advise on and implement policies and programs related to sustainability on campus. The committee, office, and/or officer focus on sustainability broadly (i.e. not just one sustainability issue, such as climate change) and cover the entire institution.

An institution that has multiple committees, offices and/or staff with responsibility for subsets of the institution (e.g. schools or departments) may earn points for this credit if it has a mechanism for broad sustainability coordination for the entire campus (e.g. a coordinating committee or the equivalent). A committee, office, and/or officer that focuses on just one department or school within the institution does not count for this credit in the absence of institution-wide coordination.

"---" *indicates that no data was submitted for this field*

Does the institution have at least one sustainability committee, office, and/or officer that focuses on sustainability broadly and covers the entire institution?:

Yes

A brief description of the activities and substantive accomplishments of the committee(s), office(s), and/or officer(s) during the previous three years:

Sustainability at UC Irvine is overseen through the Office of Environmental Planning & Sustainability (EPS) and the Sustainability Initiative.

EPS oversees the implementation of the UC Sustainable Practices Policy as it relates to operations; green building, climate protection, renewable energy, sustainable transportation and sustainable water systems. Over the past three years accomplishments and activities include the following:

• Climate Action Plan Update (2013)
• Water Action Plan (2013)
• Tree Campus USA (4th year) & Arbor Day Foundation Award for Excellence in Volunteer Management
• Climate Leadership Award -Organizational Leadership (2014)
• Completed USGBC LEED Master Site certification for both new construction and existing buildings
• Worked collaboratively with campus sustainability research programs on several projects within the campus as a living laboratory for sustainability including renewable and clean energy project deployment, smart grid technology, and sustainable water resources.

In 2013, the UC Irvine Office of the Provost and Executive Vice Chancellor established an interschool Sustainability Initiative to make engaged sustainability scholarship integral to UC Irvine's excellence as a research, teaching, and service university. The Initiative offers

the following programs and services:
• Campus Engagement Program: builds intellectual community, incentivizes and rewards faculty engagement, and transforms campus culture
• Campus Services: makes it easier for sustainability research networks to secure external funding and work together better across discipline
• Education Program: makes sustainability civics and climate neutrality part of the educational experience of all students
• Civic Engagement Program: maximizes public impact of our research and diffuses innovation
• Community Engagement Program: maximizes the efficacy of efforts undertaken by sustainability practitioners worldwide

Substantive accomplishments (July 2013-Feb 2015):

* Established partnership with Division of Undergraduate Education and Student Affairs to establish the Global Sustainability Resource Center (center for co-curricular sustainability education and leadership)
* convened 2 Summer Institutes for Sustainability Leadership (incoming students), 2 Youth Lead the World Summit (current students), 1 Global Sustainability Minor Leadership Training (students in the sustainability minor)
* convened first ever Southern California Tribal Water Forum; convened first ever environmental health and justice training and summit on climate justice for global cohort of prominent non-governmental network leaders
* created new interdisciplinary introductory sequence on Global Sustainability for incoming students;
* secured 4 year, $2.8 million NSF grant for interdisciplinary, community engaged research on flood hazard in Newport and Tijuana
* secured 3 year $750,000 grant for global engagement center focused on sustainable poverty alleviation
* formed partnership between School of Humanities with Fulbright Canada to create a visiting faculty chair in Environmental Humanities
* Incorporated UCI activities into White House's Office of Science and Technology Policy's new climate literacy initiative as an external commitment
* playing major leadership role in UC system-wide Global Climate Leadership Council's faculty engagement and education working group
* Created student fellowship programs on food and climate action.

Does the institution have at least one sustainability committee?:

Yes

The charter or mission statement of the committee(s) or a brief description of each committee's purview and activities:

A charter of the sustainability committee can be found at:

http://sustainability.uci.edu/About/Sustainability%20Committee.html

A description of the faculty Task Force on Sustainability Education can be found at:

http://www.sustainability.uci.edu/Education/ForFaculty.html

Members of each committee, including affiliations and role (e.g. staff, student, or faculty):

2014-2015 UC Irvine Sustainability Committee Members

Chair
Wendell C. Brase, Vice Chancellor, Administrative and Business Services

Office of Information Technology
Allen Schiano, Director of Clients Services

Office of Environmental Planning & Sustainability
Richard G. Demerjian, Director
Matt Deines, Senior Planner

Design & Construction Services
Brian Pratt, Associate Campus Architect
James Brittell, Quality Assurance Architect
James Wahlmeier, Quality Assurance Architect

Environmental Health & Safety
Scott Bourdon, Deputy Director
Dick Sun, Associate Deputy Director

Facilities Management
Marc A. Gomez, Assistant Vice Chancellor
Fred Bockmiller, Engineer Manager
Robert Rice, Assistant Director, Buildings and Grounds
Matt Gudorf, Campus Energy Manager
Anne Krieghoff, Superintendent of Refuse and Recycling

Hospitality & Dining Services
Jack McManus, Director
Robert Perez, Senior Resident District Manager
Tyson Monagle, Sustainability Coordinator

Housing
Dan Dooros, Associate Vice Chancellor Student Affairs
Melissa Falkenstien, Director, Capital Projects and Asset Management
Louis Gill, Director, Mesa Court Housing
Jennifer Gamble, Mesa Court Housing

Purchasing and Risk Services
Rick Coulon, Director

Transportation & Distribution Services
Ronald Fleming, Director

A&BS
Kathy Haq, Manager of Special Projects

UCI Medical Center
Greg Eikam, Director, Facility Maintenance
Dave Adrian, Life Safety Compliance Officer, EH&S

Academic Unit Faculty Representatives
Martha Mecartney, Professor, Chemical Engineering and Materials Science
Peter Bowler, Ph.D., Senior Lecturer, Ecology and Evolutionary Biology
Harry Haigler, Professor, Physiology and Biophysics

Research Center or Institute
Travis Huxman, Professor Ecology & Evolutionary Biology
Linda Cohen, Associate Dean for Research and Graduate Studies, School of Social Sciences
Abigail Reyes, Director, Academic Sustainability Initiatives, Academic Affairs

Student Representatives
Nicole Larson, TGIF
Alyssa Collins, CALPIRG
Michelle Nguygen, Real Food Challenge
Janet Ortega, PowerSave Green Campus Program
Nicky Cuevas, Students for Sustainability
Stephanie Kellogg, Sustainable Cities
Olivia Grim, Theta Psi
Joanna Itoh, The Garden Initiative
Amy Yu, Earth System Science Club
Brenna Callero, Urban Studies Club
Janet Ortega, Global Environmental Brigades
Cristina Tangreti, Irvine Students Against Animal Cruelty
Kimberly Duong, Climatepedia

Others
David Melitz, Environmental Health and Safety Coordinator, Schools of Biological Sciences and Social Ecology
Stacey Murren, Director, Student Center and Event Services
Greg Rothberg, Associate Director, Campus Recreation
Danielle Jiminez, Faculty Assistant, Informatics

Members of the faculty Task Force on Sustainability Education
Art
Jesse C. Jackson

Ecology & Evolutionary Biology
Peter Bowler
Tim Bradley
Travis Huxman (co-chair)
Jessica Pratt

Informatics
Bill Tomlinson

Education
Rebecca Black

Civil & Environmental Eng
Jean-Daniel Saphores

Earth System Science
Ellen Druffel
Mike Goulden
J. Keith Moore

Public Health
Dele Ogunseitan

Comparative Literature
Gabriele Schwab

Planning, Policy & Design
Richard Matthew (co-chair)

Anthropology
Valerie Olson

The website URL where information about the sustainability committee(s) is available:

http://www.sustainability.uci.edu/About/Sustainability%20Committee.html

Does the institution have at least one sustainability office that includes more than 1 full-time equivalent (FTE) employee?:

Yes

A brief description of each sustainability office:

The UC Irvine Office of Environmental Planning and Sustainability (EPS) serves as the campus control point for sustainability planning, implementation, coordination between the multiple campus units involved in UCI's sustainability program, and collaboration with the off-campus community. EPS responsibilities include implementation of the UC Regents Policy on Sustainability, state law, and campus sustainability plans and programs in the area of climate protection, green energy, green building, sustainable transportation, waste management, purchasing, food and dining, and water resource management. Consistent with UCI's implementation of the "Campus as a Living Laboratory for Sustainability," EPS staff work with campus and medical center staff, faculty, students, and the external community to implement sustainability programs and projects across all UCI properties.

The Sustainability Initiative offers an accessible platform from which interdisciplinary sustainability-related research, education, and engagement can launch and thrive. The Initiative enables UC Irvine to augment the campus role in addressing critical sustainability challenges in California and around the globe and to help meet the University of California's commitment to exercise leadership in accelerating the shift to sustainability. The Initiative executes this mission through integrated services and programs in education and campus, civic, and community engagement. In so doing, the Initiative facilitates interdisciplinary connections among the social sciences, humanities, arts, computing, engineering, law, the natural sciences, and the health sciences; deepens scholarly discourse underpinning our sustainability work; and reinforces campus efforts to encourage interschool research and education at UC Irvine.

Full-time equivalent (FTE) of people employed in the sustainability office(s):

10.50

The website URL where information about the sustainability office(s) is available:

http://www.sustainability.uci.edu/About/Contact.html

Does the institution have at least one sustainability officer?:

Yes

Name and title of each sustainability officer:

Richard Demerjian, Director Environmental Planning & Sustainability; Abigail Reyes, Director, Sustainability Initiative, Office of Academic Initiatives

A brief description of each sustainability officer position:

The Director of Environmental Planning and Sustainability serves as UC Irvine's Sustainability Officer. In this role he has responsibility for overseeing the planning and implementation of sustainability programs at the UC Irvine campus, UCI Medical Center, and other UCI properties. Responsibilities include leadership in the areas of campus and University-wide sustainability policy and establishing campus-wide strategies for the implementation of sustainability programs, and specific plans and initiatives including UCI's Climate Action Plan, Sustainability Plan, Long Range Development Plan, green energy initiatives and projects, green building program, habitat restoration and management, sustainable landscaping, and water resources and utility planning.

The Director of the Sustainability Initiative provides integrated campus leadership and intellectual vision for research, outreach and educational initiatives related to community-engaged sustainability scholarship. Incumbent oversees the establishment of a framework for this new coordinated portfolio of functions supporting sustainability scholarship, synchronizing efforts across Schools, the Office of Research, University Advancement, community leaders and organizations and other campus units. Incumbent serves as the primary campus resource for initiatives related to community-engaged sustainability scholarship, providing coordinated leadership and guidance to faculty, staff, students, community members and funding entities by ensuring the following: identification and shepherding of new collaborative opportunities in the area of community-engaged sustainability scholarship; creation and execution of the initiative's strategic plan; oversight of fundraising efforts, grant-writing and donor relations; development of new outreach and academic programs; and management oversight for all related finances, facilities, human resources, and publicity.

http://www.sustainability.uci.edu/About/Abby.html

The website URL where information about the sustainability officer(s) is available:

http://www.sustainability.uci.edu/About/RichardDemerjian.html

Sustainability Planning

Responsible Party

Richard Demerjian
Director
Office of Environmental Planning and Sustainability

Criteria

Institution has current and formal plans to advance sustainability. The plan(s) cover one or more of the following areas:

- Curriculum
- Research (or other scholarship appropriate for the institution)
- Campus Engagement
- Public Engagement
- Air & Climate
- Buildings
- Dining Services/Food
- Energy
- Grounds
- Purchasing
- Transportation
- Waste
- Water
- Diversity & Affordability
- Health, Wellbeing & Work
- Investment
- Other

The plan(s) may include measurable objectives with corresponding strategies and timeframes to achieve the objectives.

The criteria may be met by any combination of formally adopted plans, for example:

- Strategic plan or equivalent guiding document
- Campus master plan or physical campus plan
- Sustainability plan
- Climate action plan
- Human resources strategic plan
- Diversity plan

For institutions that are a part of a larger system, plans developed at the system level are eligible for this credit.

Does the institution have current and formal plans to advance sustainability in the following areas? Do the plans include measurable objectives?:

	Current and Formal Plans (Yes or No)	Measurable Objectives (Yes or No)
Curriculum	Yes	Yes
Research (or other scholarship)	Yes	Yes
Campus Engagement	Yes	Yes
Public Engagement	Yes	Yes
Air and Climate	Yes	Yes
Buildings	Yes	Yes
Dining Services/Food	Yes	Yes
Energy	Yes	Yes
Grounds	Yes	Yes
Purchasing	Yes	Yes
Transportation	Yes	Yes
Waste	Yes	Yes
Water	Yes	Yes
Diversity and Affordability	Yes	Yes
Health, Wellbeing and Work	Yes	Yes
Investment	Yes	Yes

Other	No	No

A brief description of the plan(s) to advance sustainability in Curriculum:

UC Irvine supplements its Strategic Plan with Two-Year Performance Goals. The Two-Year Performance Goals for 2013-2015* include the following plan to advance sustainability in the curriculum:

To continue to develop professional schools and new programs in synergy with our core academic disciplines. UC began began a program to establish areas of interschool excellence, starting with research and teaching across departmental lines that was already under way. The largest program to date is the Sustainability Initiative, which supports interschool sustainability-related research, education, and community engagement. The campuswide initiative elevates established and emerging interdisciplinary collaboration, broadens public impact of research, and augments UC Irvine's scholarly contributions to regional, state, national and global sustainability solutions. The initiative aims to make sustainability and climate-neutrality part of the educational experience of all students. In addition to the two existing sustainability-related master's degree programs within our core academic disciplines, we anticipate the emergence of additional, new professional and academic graduate programs in sustainability. Both discipline-specific and interschool programs are being considered and developed." UC Irvine Two-Year Performance Goals 2013-15, p. 13.

* The 2013-15 Two-Year Plan is in final review and not yet available on the campus's website.

The measurable objectives, strategies and timeframes included in the Curriculum plan(s):

Indicator: number of new programs. UC Irvine Two-Year Performance Goals 2013-15, p. 12.

Timeframe: 2013-2015. UC Irvine Two-Year Performance Goals 2013-15.

Strategy: In 2012, Senior Vice Provost for Academic Planning, Michael Clark, convened an ad hoc faculty task force on sustainability education. Task Force members have met periodically since August 2012 to strengthen existing and create new formal education programs in sustainability. Thus far, the Task Force has strengthened the existing Global Sustainability Minor (2012-2013), 2) is assessing feasibility of a sustainability graduate emphasis (current project), and 3) assessing feasibility of a sustainability graduate degree program (current project). In parallel, during AY 2012-2013, through the former Environment Institute, the Task Force convened a Student Advisory Council on Sustainability Education (SACSE). SACSE meets monthly and pursues a range of projects aimed at supporting and informing the work of the Task Force.

The faculty Task Force on Sustainability Education has also commenced engagement with the Academic Senate leadership regarding the possible introduction of a proposal to create a general education requirement on sustainability for undergraduates at UCI (AY 14-15).

Accountable parties, offices or departments for the Curriculum plan(s):

Abigail Reyes, Director, Sustainability Initiative, Office of Academic Initiatives

A brief description of the plan(s) to advance sustainability in Research (or other scholarship):

In 2013, the Office of the Provost and Executive Vice Chancellor created the interschool Sustainability Initiative. The Sustainability Initiative Three-Year Plan, created in December 2013, provides for the following campus services to advance sustainability in research:

“The Sustainability Initiative also provides the following campus services to strengthen sustainability scholarship intellectually and practically. Sustainability Science and Civics Implementation: the Initiative will offer training to faculty, staff, and students on identified challenges in team science and community engaged scholarship. To begin, the Initiative will host faculty development workshops that bring to Irvine faculty leaders from peer campuses with demonstrated success at engaged inter- and trans-disciplinary research in sustainability-related fields. These workshops will also draw upon UC Irvine’s own faculty members who have, through practice and scholarship, made headway into the “science of team science” and engaged scholarship. In AY 14-15, the first workshop on community engaged scholarship and research justice will be convened.

Research Development and Special Project Assistance: The Initiative helps develop faculty-led interdisciplinary research proposals and other special projects. Research proposal support comes in the form of research, writing, editing, project management, and project design. When appropriate, the Initiative coordinates such efforts with the Office of Research. Special projects support comes in the form of idea incubation, group facilitation, networking, resource sharing, and other staff expertise. In AY 14-15, the Sustainability Initiative incubated the research, education, and community engagement activities of the oceans and coastal and marine faculty members into a new interschool coordinated effort.

“Incentivizing and Rewarding Engagement: A key to deepening the scholarship of sustainability is valuing it institutionally, including financially." In AY 14-15, in coordination with their deans and chairs, the Sustainability Initiative supported two assistant faculty members who have stepped up to take major service and leadership roles in sustainability education and engagement on campus. We also created a student fellowship program for food and climate action.

The measurable objectives, strategies and timeframes included in the Research plan(s):

Deliverables: Three faculty development workshops, three interschool engaged sustainability research proposals submitted, and six competitive awards to faculty and graduate student pairs.

Timeframe: 2014-2017. Sustainability Initiative Three-Year Plan December 2013.

Accountable parties, offices or departments for the Research plan(s):

Abigail Reyes, Director, Sustainability Initiative, Office of Academic Initiatives

A brief description of the plan(s) to advance Campus Engagement around sustainability:

In 2013, the Office of the Provost and Executive Vice Chancellor created the interschool Sustainability Initiative. The Sustainability Initiative Three Year Plan, created in December 2013, provides for the following campus engagement program:

“Campus Engagement Program—Deepening the Scholarship of Sustainability. Sustainability is an intellectually pervasive concept, adopted by many academic fields and practitioner sectors. TheSustainability Initiative aims to forward and deepen the intellectual conversation regarding the scholarship of sustainability at UC Irvine across discipline and sector, and among faculty, staff, and students. This work is both prerequisite to, and part of, our effort to mobilize serious interschool planning to make engaged sustainability scholarship and practice integral to UC Irvine’s excellence as a research and teaching university. Building Intellectual Community: Interschool collaboration is often driven by relationships. We [ ] foster[] professional relationships among Sustainability Scholars across schools and programs by using the Office of Academic Initiatives to bring scholars together in social settings that signal the campus’ institutional commitment, thus elevating sustainability scholarship in the eyes of individual faculty members, the deans, and strategic external partners. Deepening Dialogue: Whereas social events [] build community, the Sustainability Scholars Roundtable will challenge us to deepen our campus conversation about sustainability intellectually and across disciplines…Transforming Campus Culture: The Sustainability Initiative will work with the Green Campus Initiative to create a campus culture of sustainability in administrative areas of

the schools and other units. While the Green Campus Initiative has accomplished a macro-level to shift in campus energy and water consumption toward climate neutrality and sustainability, we have yet to transform the daily experience and practices of our staff in most units. [ ] We will train a team of student interns in the professional skills and substantive knowledge needed to work effectively with staff to achieve green office certification through an existing external certification program." Sustainability Initiative Three-Year Plan December 2013, pp. 6-7.

The measurable objectives, strategies and timeframes included in the Campus Engagement plan:

Deliverables: Three Sustainability Scholars Receptions, Two Roundtables, launched green office certification program

Timeframe: 2014-2017. Sustainability Initiative Three-Year Plan December 2013.

Accountable parties, offices or departments for the Campus Engagement plan(s):

Abigail Reyes, Director, Sustainability Initiative, Office of Academic Initiatives

A brief description of the plan(s) to advance Public Engagement around sustainability:

In 2013, the Office of the Provost and Executive Vice Chancellor created the interschool Sustainability Initiative. The Sustainability Initiative Three Year Plan, created in December 2013, provides for the following civic and community engagement programs:

"Civic Engagement Program—Maximizing Public Impact & Diffusing Innovation. The future of effective sustainability management will increasingly depend on the capacity of researchers, policymakers, NGOs, and private sector entrepreneurs to work together to co-generate research questions, co-produce knowledge, and take well-developed innovations from the field, classroom, and laboratory and apply them to practical problems at different spatial levels. Reaching Out: [In] partnership with
[the Office of] Community and Government Relations, the Initiative [] work[s] with Sustainability Scholars to build up our innovation diffusion through traditional outreach means (such as seminars, workshops, local community presentations, legislative outreach, and media placement) and faculty training to excel at such outreach. To design this work, the Initiative is first piloting a partnership with select interdisciplinary research programs to deliver, or support delivery of, the "broader impacts" objectives of the research programs (including impact on policy, students, curriculum, workforce, and relevant community stakeholders). If successful, the Initiative could expand to include a standing set of research impact programs through which any interested Sustainability Scholars could increase the public reach of their research. Inviting In: [The] Initiative [supports Sustainability Scholars] to bring stakeholders together periodically – as well as other national and international industrial and governmental user groups – through conferences, workshops, and symposia to identify future research activities on innovation diffusion…

"Community Engagement Program—Accelerating the Shift. The Community Engagement
Program threads together all of the research and education efforts of the Initiative to begin to position UC
Irvine to emerge as a driving force in maximizing the efficacy of efforts undertaken by sustainability practitioners worldwide. Three interconnected approaches guide our work to accelerate the shift to sustainability. We:

• provide technical assistance through research expertise,
• open up avenues for public discourse, and
• build capacity of relevant stakeholders to participate meaningfully in public discourse.

The Initiative fosters dialogue and offers training to researchers and community leaders alike about engaged sustainability scholarship and leadership, laying the foundation for research partnerships and joint initiatives. Tribal Community Engagement on Environmental Issues: While our interschool research engages a wide range of communities, we place special emphasis on establishing engagement with

tribal communities. In so doing, we express an institutional commitment to sustainability's social equity principle. In conjunction with faculty in the Schools of Law, Biological Sciences, Social Ecology,
Humanities, and Social Sciences, as well as the [UC Irvine] American Indian Resource Program, we develop research, education, and engagement opportunities related to tribal communities and the environment at UC Irvine's main campus and at the Steele/Burnand Anza-Borrego Desert Research Center. Success over time will build the campus' reputation as an innovative and cutting edge leader in interdisciplinary community engaged research and action as related to the identified environmental needs and interests of Indigenous communities; create a Tribal Community Engagement Program at the Steele/Burnand Anza- Borrego Desert Research Center that will serve as a nexus for research, advocacy, and training on matters related to Indigenous peoples; and establish the Anza-Borrego Center as a system-wide example of best practices in tribal community engagement within the UC Natural Reserve System." Sustainability Initiative Three-Year Plan December 2013, pp. 9-10.

The measurable objectives, strategies and timeframes included in the Public Engagement plan(s):

Deliverables: Civic Engagement: a Research Impact program; two interschool faculty and graduate student trainings on civic engagement; 9 hosted sustainability-related conferences, open to public (3 per year planned); Tribal Community Engagement: campus reputation as an innovative and cutting edge leader in interdisciplinary community engaged research and action as related to the identified environmental needs and interests of Indigenous communities; Tribal Community Engagement Program at the Steele/Burnand Anza-Borrego Desert Research Center that serves as a nexus for research, advocacy, and training on matters related to Indigenous peoples; and the Anza-Borrego Center established as a system-wide example of best practices in tribal community engagement within the UC Natural Reserve System.

Timeframe: 2014-2017. Sustainability Initiative Three-Year Plan December 2013.

Accountable parties, offices or departments for the Public Engagement plan(s):

Abigail Reyes, Director, Sustainability Initiative, Office of Academic Initiatives

A brief description of the plan(s) to advance sustainability in Air and Climate:

The UC Irvine Climate Action Plan (CAP) was adopted in 2007 to provide strategies for the University to achieve its institutional climate commitments. The 2013 CAP Update retains the fundamental planning principles and strategies while providing updated forecasts, project data, progress, and implementation strategies for the campus to achieve its reduction targets.

The measurable objectives, strategies and timeframes included in the Air and Climate plan(s):

The UCI Climate Action Plan provides measurable objectives for reduction of greenhouse gas emissions for specific target years. Reduction strategies are identified within the following areas:
Energy efficiency
Sustainable transportation
Green building
On and off site renewable energy
Purchased electricity mix
Biogas procurement
Carbon offsets

Timeframe: The 2013 CAP Update details GHG reduction targets which are to reach year 2000 emissions by 2014, 1990 emissions by 2020, and for climate neutrality (buildings and fleet) by 2025.

Accountable parties, offices or departments for the Air and Climate plan(s):

Environmental Planning & Sustainability
Facilities Management
Student Housing
Transportation & Distribution Services
UCI Medical Center

A brief description of the plan(s) to advance sustainability in Buildings:

The Green Building Design section of the UC Sustainability Practices Policy specifies that new buildings will be designed and commissioned to outperform the CBC energy efficiency standards by at least 20%, achieve a USGBC LEED 'Silver' certification at a minimum, and achieve at least two points within the LEED-NC's Water Efficiency category.

The UC Irvine Sustainable Building Operations and Maintenance Program (2013) details practices to conserve water and energy, reduce or eliminate waste, promote healthy indoor air quality, and support the purchasing of environmentally preferable materials and supplies within existing buildings on campus.

The measurable objectives, strategies and timeframes included in the Buildings plan(s):

All new buildings to be constructed on UC Irvine campus will attain a LEED 'Silver' at a minimum certification through USGBC.

Sustainable Building Operations and Maintenance Program Practices:
1. All facilities will be managed and monitored with an emphasis on deep energy efficiency consistent with UC Policy and UC Irvine’s Energy management programs (

http://www.fm.uci.edu/units/utils_energy.html

). This includes the goal of exceeding UC policy of 20% reduction in energy use in all buildings through efficiency and conservation programs. Building level metering and sub-metering will be installed and monitored on all campus buildings where financially viable.

2. All facilities will be managed and monitored with a goal of deep water efficiency consistent with UC Sustainability Policy and UC Irvine Water Action Plan (

www.sustainability.uci.edu

) to exceed UC Policy of 20% water savings and achieve UC Irvine’s stretch goal of 30% water savings from 2005-2007 baseline condition. Building level water metering and sub-metering shall be installed in all facilities where financially feasible to provide detailed use data.

3. Environmentally preferable materials, including cleaning, maintenance, and painting and coating supplies, shall be purchased and used in all building operations and maintenance to protect the health of building occupants and the surrounding environment. Products meeting Green Seal, Environmental Choice or similar approved third-party certification shall be used.

4. All indoor pest control shall adhere to UC Irvine’s Integrated Pest Management (IPM) Program (

http://www.fm.uci.edu/units/pest_mgt.html

) to protect the health of building occupants, the surrounding environment, and ensure that least toxic materials are applied.

5. The indoor environmental quality of campus buildings shall be managed in conformance with EH&S Clean Air Program

http://www.policies.uci.edu/adm/pols/903-10.html

to ensure the health and safety of building occupants.

6. All building maintenance and operations practices will consider impacts to the surrounding site areas to ensure the environmental quality of people and land resources surrounding the buildings.

Accountable parties, offices or departments for the Buildings plan(s):

Design & Construction Services is responsible for the LEED certification process for new construction.

Facilities Management is responsible for the implementation of the Sustainable Building Operations & Maintenance Program.

A brief description of the plan(s) to advance sustainability in Dining Services/Food:

Dining and Food Services sustainability is guided by the UCOP Policy on Sustainable Practices which has objectives of 20% sustainable foods by 2020 and Zero Waste by 2020.
UCI Hospitality & Dining is committed to reducing waste at dining locations across campus. Based on the successful post-consumer retail model set by Phoenix Food Court, which achieved Zero Waste designation in 2013, UCI Hospitality & Dining will expand its post-consumer composting program to additional retail locations. Additionally, UCI Hospitality & Dining is focused on increasing sustainable purchases and continuing to improve the ways in which sustainable purchases are tracked.

UCI Hospitality & Dining also addresses sustainability through education of students across campus. Outreach has expanded over the past two years to address more diverse topics, including water and energy conservation, education about Fair Trade, organic and other labels, social justice awareness, waste reduction and health (personal sustainability), among others. UCI Hospitality & Dining will continue to expand and improve the ways in which outreach events are conducted.

The measurable objectives, strategies and timeframes included in the Dining Services/Food plan(s):

For waste reduction, our measurable objectives include additional Zero Waste designations for campus dining locations. This is objective is guided by the UCOP Policy for Zero Waste by 2020.

The campus objective for sustainable purchasing is to achieve a 5% increase in sustainable purchases annually over prior year. This objective reflects the adopted Green Stake's policies.

For outreach and education, the number of students successfully engaged is used to evaluate success of programs, along with any measurable impacts, such as waste reduction, tied specifically to the educational topic.

Accountable parties, offices or departments for the Dining Services/Food plan(s):

Jack McManus
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A brief description of the plan(s) to advance sustainability in Energy:

Both the Climate Action Plan (CAP) and Sustainable Building Operations and Maintenance Program provide direction for the campus to advance sustainability related to energy. The CAP provides strategies for deep energy efficiency and conservation programs and the deployment and procurement of on and off-site renewable energy. The Sustainable Building Operations and Maintenance Program details planning for deeper energy efficiency through building level metering.

The measurable objectives, strategies and timeframes included in the Energy plan(s):

The Climate Action Plan specifies reduction targets for overall GHG levels (2020 levels by 2014, 1990 levels by 2020, climate neutrality by 2025). Opportunities in energy efficiency, laboratory energy use, energy conservation, and renewable and green energy systems are detailed within the plan.

The Sustainable Building Operations and Maintenance Program states the following:
'All facilities will be managed and monitored with an emphasis on deep energy efficiency consistent with UC Policy and UC Irvine's Energy management programs (

http://www.fm.uci.edu/units/utils_energy.html

). This includes the goal of exceeding UC policy of 20% reduction in energy use in all buildings through efficiency and conservation programs. Building level metering and sub-metering will be installed and monitored on all campus buildings where financially viable.'

Accountable parties, offices or departments for the Energy plan(s):

Facilities Management
Office of Environmental Planning & Sustainability

A brief description of the plan(s) to advance sustainability in Grounds:

The 1995 Green and Gold Plan provides guidance for the sustainable management of campus grounds and landscaping. The approved plant list for the Green & Gold Plan consisting of climate appropriate plants was updated in 2014. Further planning for sustainable landscaping can be found in the 2013 Water Action Plan which identifies strategies for sustainable water use on campus grounds and low energy stormwater treatment features.

The measurable objectives, strategies and timeframes included in the Grounds plan(s):

The Green and Gold Plan's goals and objectives follow:
Goal 1. Develop a landscape that is sustainable and provides for long term conservation of resources: energy, water, labor, and reduced production of green waste.

Water Conservation—Utilize plant materials, design and planting techniques, and irrigation systems that minimize water usage.
Plant Suitability—Use native and other environmentally suitable plant materials.
Species and Age Diversity—Ensure both diversity of species and diversity of age in the urban forest. Trees of the same size and age tend to decline and die during the same period causing costly planning and maintenance problems and necessitating long periods of re-growth.
De-Intensification of Eucalyptus Trees—Remove existing eucalyptus trees due to hazards or decline and replace with native and drought tolerant species which will introduce age diversity in the central campus.

Goal 2. Develop campus landscaping and open space networks that maximize local and regional natural resource values.

Habitat Value—Utilize native plant materials that provide high wildlife foraging value.
Habitat and Open Space Linkages—Develop habitat corridors utilizing UCI's historic drainage ways, or arroyos, that connect the campus with regional open space areas such as the San Joaquin Hills and the wetland areas of the Upper Newport Bay, San Joaquin Freshwater Marsh, and San Diego Creek. Protect existing habitat resources. Restore, as networks of corridors and habitat sites, the isolated patches and discontinuous landscape corridors that were created under the original LRDP development. This will benefit the campus and also support regional habitat planning goals.
Preservation—Preserve natural features and environmentally significant areas. Retain the character of campus topography, ridge lines, view sheds, and vistas. Preserve historic landscape.

Goal 3. Develop landscaping that provides the greatest functional value consistent with comprehensive campus planning and design objectives.

Maximize Functionality—Multiple functions, beyond aesthetic considerations, must be provided: define spaces, provide solar shading, define circulation elements, provide visual screening, reduce scale of monumental campus buildings, create public open spaces, and provide recreational amenities.
Design Consistency—Implement campus landscape that is consistent with, and supports, campus planning and design objectives to provide a unifying framework, place identity, and human scale to the campus.
Institutional Quality—Utilize plant materials, hardscape, and street furniture of institutional quality (i.e., long-lived, pest resistant, and durable).

Goal 4. While selection of appropriate plant materials and proper planting and irrigation techniques are crucial first steps in developing sustainable landscaping, it is equally important that adequate management programs are in place to preserve this asset.

Pruning—Prune to remove hazards and to improve vigor and aesthetics.
Fertilization—Environmentally responsible nutrient management to maintain plant health and reduce susceptibility to pests, diseases, and environmental stresses.
Inspection—Scheduled inspections for overall health, safety, and appearance.
Removal and Replacement—Even with good tree management, all trees will ultimately decline and require replacement. When removals are required, they are evaluated within these criteria: 1) dead or dying trees; 2) trees that pose a hazard to people or may cause significant damage to buildings, property, or hardscape; and 3) trees growing in undesirable locations.
Protection—Control disease and pests through an integrated and environmentally responsible pest management program. Protect from physical hazards.
Green Waste—To minimize waste and meet solid waste regulatory requirements, all trimmings should be processed into mulch and used to control weeds, control erosion, retain soil moisture, and provide nutrients.
Habitat Areas—While habitat areas will generally require far less ongoing maintenance than more urban landscape areas, special management is required for protection of habitat value and for teaching and research activities in these areas.

Water Action Plan -

The 2013 Water Action Plan set a 30% total landscape irrigation water reduction target by 2020. To achieve this goal the campus is proposing the following strategies:

1. Remove underutilized turf and replace with California native plants or mulch
2. Improve irrigation system efficiency
3. Capture stormwater and reuse

Accountable parties, offices or departments for the Grounds plan(s):

The Green and Gold Plan was developed by the Office of Environmental Planning & Sustainability and is implemented by the UCI Offices of Environmental Planning and Sustainability, Design and Construction Services, and Facilities Management.

The Water Action Plan was developed by the Office of Environmental Planning & Sustainability with the Sustainable Water Systems Working Group including representatives from Facilities Management, Student Housing, Environmental Health & Safety, and the Medical Center.

A brief description of the plan(s) to advance sustainability in Purchasing:

The Sustainable Buildings Operations and Maintenance Program provides practices for the purchase of environmentally preferable materials and supplies.

The measurable objectives, strategies and timeframes included in the Purchasing plan(s):

Environmentally preferable materials, including cleaning, maintenance, and painting and coating supplies, shall be purchased and used in all building operations and maintenance to protect the health of building occupants and the surrounding environment. Products meeting Green Seal, Environmental Choice or similar approved third-party certification shall be used.

Accountable parties, offices or departments for the Purchasing plan(s):

Materiel & Risk Management

A brief description of the plan(s) to advance sustainability in Transportation:

UC Irvine, through Transportation and Distribution Services' Sustainable Transportation program, seeks to minimize the frequency at which students, staff, faculty, and visitors drive alone in automobiles to the campus. The Sustainable Transportation program promotes, facilitates, supports, and, in some cases subsidizes the use of non-drive-alone transportation modes such as carpooling, vanpooling, transit use, bicycling, and walking. Furthermore, UC Irvine's commitment to providing on-campus housing for as many of its students, staff, and faculty as possible has directly contributed to the very high rate of walking, bicycling, transit riding to/from the campus for work and class.

The measurable objectives, strategies and timeframes included in the Transportation plan(s):

The Sustainable Transportation program measures its success yearly via a mandatory employee survey verified by the South Coast Air Quality Management District. For the year 2013, UC Irvine's AVR was 1.92 (Average Vehicle Ridership, 1.92 people coming to campus per automobile)—the highest of any employer with greater than 3,000 employees in the SCAQMD region. As part of its commitment to environmental sustainability and despite meeting and exceeding its regulatory mandate of a 1.5 AVR, UC Irvine has goal of continually reducing the commute drive alone rates (and thus GHG emissions) of its students, staff, and faculty.

Accountable parties, offices or departments for the Transportation plan(s):

Transportation & Distribution Services

A brief description of the plan(s) to advance sustainability in Waste:

The University of California's Sustainable Practices Policy provides direction for sustainable waste management. The UCI Solid Waste Diversion Plan details current progress and areas for expansion in recycling, composting, and improved collaboration.

The measurable objectives, strategies and timeframes included in the Waste plan(s):

The UC Policy set goals for all UC's to reach diversion rates of 50% by June 30, 2008, 75% by June 30, 2012, and ultimately zero waste by 2020.

Accountable parties, offices or departments for the Waste plan(s):

Facilities Management

A brief description of the plan(s) to advance sustainability in Water:

The 2013 Water Action Plan guides sustainability planning related to water on campus. The plan provides goals, strategies, and opportunities to not only reduce potable and reclaimed water but to also improve stormwater management.

The measurable objectives, strategies and timeframes included in the Water plan(s):

UC Irvine is on track to meet the UC system-wide goal of 20% reduction by 2020 and has adopted a stretch goal of 30% reduction in potable use as well as landscape water use by 2020. The plan also requires new development to incorporate Low Impact Design into new construction projects.

Accountable parties, offices or departments for the Water plan(s):

Implementation of the Water Action Plan is directed by the Sustainable Water Systems Working Group whose members represent the following departments:
Office of Environmental Planning & Sustainability
Facilities Management
Sustainable Water Research Faculty
Environmental Health & Safety
Student Housing
Campus Recreation

A brief description of the plan(s) to advance Diversity and Affordability:

UC Irvine's Two-Year Plan calls for increased diversity of faculty and students. The campus seeks to advance diversity through multiple programs aimed at students, faculty and staff. Some of the diversity programs are described more fully online at

http://www.uci.edu/diversity/

and on the websites for the following organizations:

Student Affairs

http://www.grad.uci.edu/prospective-students/

http://www.ofas.uci.edu/content/

Graduate Division

http://www.grad.uci.edu/prospective-students/

The measurable objectives, strategies and timeframes included in the Diversity and Affordability plan(s):

UC Irvine is committed to excellence through diversity and to the goal of reflecting diversity in our faculty, student and staff populations, as well as our teaching, research and public service endeavors.

Accountable parties, offices or departments for the Diversity and Affordability plan(s):

Academic Personnel
Student Affairs
Human Resources
Equal Opportunity and Diversity

A brief description of the plan(s) to advance sustainability in Health, Wellbeing and Work:

A number of plans affect the health, wellbeing, and work environment for students, faculty, and staff at UC Irvine. The following plans exemplify UC Irvine and the UC system's commitment:

The University of California Smoke & Tobacco Free Policy
A new systemwide policy that provides an environment that is free of tobacco and smoke in an effort to create a clean, healthy working and learning atmosphere. This policy benefits everyone.

Effective Jan. 1, 2014, the University of California is entirely smoke and tobacco free. Smoking and the use of all tobacco products including cigarettes, e-cigarettes, cigars, snuff, water pipes, pipes, hookahs, chew and any other non-combustible tobacco product will be prohibited across all campuses and facilities, including inside buildings, outdoor areas and sidewalks, parking lots, and residential housing areas.

http://www.policies.uci.edu/adm/pols/903-14.html

The measurable objectives, strategies and timeframes included in the Health, Wellbeing and Work plan(s):

The University of California supports a culture of wellness through developing and supporting:

-- Healthy policies
-- Healthy work and academic environments
-- Collaboration and participation of all members of the University community
-- Healthy personal skills of members of the University community
-- Reorientation of services to prevent disease/injury, promote health and encourage wellness

Accountable parties, offices or departments for the Health, Wellbeing and Work plan(s):

Human Resources
Environmental, Safety & Health

A brief description of the plan(s) to advance sustainability in Investment:

In 2012 the University of California system-wide Sustainability Steering Committee formed a task force to evaluate Socially Responsible Investing (SRI). The Steering Committee charged the SRI Task Force with the below objectives to be completed as a part of UC sustainable investment planning.

The measurable objectives, strategies and timeframes included in the Investment plan(s):

• Develop a common understanding of socially responsible investment practices that will lead to consistent data collection and reporting for UC campuses
• Complete an assessment of current best practices in socially responsible investing among peer universities
• Identify areas where current UC Investment practices can be improved and make recommendations for how to make those improvements.

These three objectives for 2013 were completed and the SRI Task Force is continuing to work on additional objectives related to SRI planning in 2014.

Accountable parties, offices or departments for the Investment plan(s):

A brief description of the plan(s) to advance sustainability in other areas:

UC Irvine is working toward its goal of completing a $1 billion fundraising campaign: Shaping the Future, the first effort of this scale in the history of the campus. The campaign articulates and mirrors the Chancellor's vision and is directly aligned with the campus's strategic plan. There are five overall themes for the campus: 1) health, 2) sustainable energy and environment, 3) global connections, 4) students first, and 5) learning and the mind. After an initial quiet phase, the campaign was launched in 2008, and as of the close of FY 13, the campaign had raised $829.6 million.

The measurable objectives, strategies and timeframes included in the other plan(s):

UC Irvine established a fundraising goal of $1 billion

Accountable parties, offices or departments for the other plan(s):

University Advancement (development staff)

The institution's definition of sustainability:

The University of California, Irvine is committed to sustainable practices that minimize the campus's "ecological footprint" and conserve finite resources for future generations. We strive to engage students, faculty, staff, the community, and other institutions in the pursuit of common solutions to address social, cultural, and economic needs while protecting the beauty and resources of the natural world around us.

Does the institution's strategic plan or equivalent guiding document include sustainability at a high level?:

Yes

A brief description of how the institution's strategic plan or equivalent guiding document addresses sustainability:

An extensive campus-wide strategic planning process in 2004-05 led to the publication of a 10-year strategic plan for UC Irvine: "Focus on Excellence: A Strategy for Academic Development at the University of California, Irvine 2005-2015." The plan is available online at

http://www.strategicplan.uci.edu/

. The campus established near-term (two-year) priorities in support of the plan, and these are also available for public review. The 2012-14 Two-Year Plan discussed "UC Irvine as a Living Laboratory for Sustainability" and the 2013-15 Two-Year Plan (which is in final review and not-yet public) identifies this as one of the campus's top five priorities. The plan also reiterates the five main pillars of the campus's $1 billion campaign, which collectively address various aspects of the interconnectedness of social, economic, and environmental issues.

The website URL where information about the institution's sustainability planning is available:

http://www.evc.uci.edu/academicplanning/documents/TwoYearGoals2012-14FinalToUCOP.pdf

Governance

Criteria

Part 1

Institution’s students participate in governance in one or more of the following ways:

A. All enrolled students, regardless of type or status, have an avenue to participate in one or more governance bodies (through direct participation or the election of representatives)

B. There is at least one student representative on the institution’s governing body. To count, student representatives must be elected by their peers or appointed by a representative student body or organization.

And/or

C. Students have a formal role in decision-making in regard to one or more of the following:

- Establishing organizational mission, vision, and/or goals
- Establishing new policies, programs, or initiatives
- Strategic and long-term planning
- Existing or prospective physical resources
- Budgeting, staffing and financial planning
- Communications processes and transparency practices
- Prioritization of programs and projects

Part 2

Institution’s staff participate in governance in one or more of the following ways:

A. All staff members, regardless of type or status, have an avenue to participate in one or more governance bodies (through direct participation or the election of representatives)

B. There is at least one non-supervisory staff representative on the institution’s governing body. To count, staff representatives must be elected by their peers or appointed by a representative staff body or organization.

And/or

C. Non-supervisory staff have a formal role in decision-making in regard to one or more of the areas outlined in Part 1.

Part 3

Institution’s faculty participate in governance in one or more of the following ways:

A. All faculty members, regardless of type or status, have an avenue to participate in one or more governance bodies (through direct participation or the election of representatives)

B. There is at least one teaching or research faculty representative on the institution’s governing body. To count, faculty representatives must be elected by their peers or appointed by a representative faculty body or organization.

And/or

C. Faculty have a formal role in decision-making in regard to one or more of the areas outlined in Part 1.

Participatory or shared governance bodies, structures and/or mechanisms may be managed by the institution (e.g. committees, councils, senates), by stakeholder groups (e.g. student, faculty and staff committees/organizations), or jointly (e.g. union/management structures).

Structures or mechanisms adopted by entities of which the institution is part (e.g. government or university system) may count for this credit as long as they apply and are adhered to by the institution.

This credit was marked as **Not Pursuing** so Reporting Fields will not be displayed.

Diversity & Affordability

This subcategory seeks to recognize institutions that are working to advance diversity and affordability on campus. In order to build a sustainable society, diverse groups will need to be able to come together and work collaboratively to address sustainability challenges. Members of racial and ethnic minority groups and immigrant, indigenous and low-income communities tend to suffer disproportionate exposure to environmental problems. This environmental injustice happens as a result of unequal and segregated or isolated communities. To achieve environmental and social justice, society must work to address discrimination and promote equality. The historical legacy and persistence of discrimination based on racial, gender, religious, and other differences makes a proactive approach to promoting a culture of inclusiveness an important component of creating an equitable society. Higher education opens doors to opportunities that can help create a more equitable world, and those doors must be open through affordable programs accessible to all regardless of race, gender, religion, socio-economic status and other differences. In addition, a diverse student body, faculty, and staff provide rich resources for learning and collaboration.

Credit
Diversity and Equity Coordination
Assessing Diversity and Equity
Support for Underrepresented Groups
Support for Future Faculty Diversity
Affordability and Access

Diversity and Equity Coordination

Criteria

Part 1

Institution has a diversity and equity committee, office and/or officer tasked by the administration or governing body to advise on and implement policies, programs, and trainings related to diversity and equity on campus. The committee, office and/or officer focuses on student and/or employee diversity and equity.

Part 2

Institution makes cultural competence trainings and activities available to all members of one or more of the following groups:

- Students
- Staff
- Faculty
- Administrators

This credit was marked as **Not Pursuing** so Reporting Fields will not be displayed.

Assessing Diversity and Equity

Criteria

Institution assesses diversity and equity on campus and uses the results to guide policy, programs, and initiatives. The assessment(s) address one or more of the following areas:

1. **Campus climate**, e.g. through a survey or series of surveys to gather information about the attitudes, perceptions and experiences of campus stakeholders and underrepresented groups
2. **Student diversity and educational equity**, e.g. through analysis of institutional data on diversity and equity by program and level, comparisons between graduation and retention rates for diverse groups, and comparisons of student diversity to the diversity of the communities being served by the institution
3. **Employee diversity and employment equity**, e.g. through analysis of institutional data on diversity and equity by job level and classification, and comparisons between broad workforce diversity, faculty diversity, management diversity and the diversity of the communities being served by the institution
4. **Governance and public engagement**, e.g. by assessing access to and participation in governance on the part of underrepresented groups and women, the centrality of diversity and equity in planning and mission statements, and diversity and equity in public engagement efforts

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This credit was marked as **Not Pursuing** so Reporting Fields will not be displayed.

Support for Underrepresented Groups

Criteria

Part 1

Institution has mentoring, counseling, peer support, academic support, or other programs in place to support underrepresented groups on campus.

This credit excludes programs to help build a diverse faculty throughout higher education, which are covered in *PA 7: Support for Future Faculty Diversity*.

Part 2

Institution has a discrimination response policy, program and/or team (or the equivalent) to respond to and support those who have experienced or witnessed a bias incident, act of discrimination or hate crime.

This credit was marked as **Not Pursuing** so Reporting Fields will not be displayed.

Support for Future Faculty Diversity

Criteria

Institution administers and/or participates in a program or programs to help build a diverse faculty throughout higher education.

Such programs could take any of the following forms:

- Teaching fellowships or other programs to support terminal degree students from underrepresented groups in gaining teaching experience. (The terminal degree students may be enrolled at another institution.)
- Mentoring, financial, and/or other support programs to prepare and encourage undergraduate or other non-terminal degree students from underrepresented groups to pursue further education and careers as faculty members.
- Mentoring, financial, and/or other support programs for doctoral and post-doctoral students from underrepresented groups.

This credit was marked as **Not Pursuing** so Reporting Fields will not be displayed.

Affordability and Access

Criteria

Part 1

Institution has policies and programs in place to make it accessible and affordable to low-income students and/or to support non-traditional students. Such policies and programs may include, but are not limited to, the following:

- Policies and programs to minimize the cost of attendance for low-income students
- Programs to equip the institution's faculty and staff to better serve students from low-income backgrounds
- Programs to prepare students from low-income backgrounds for higher education (e.g. U.S. federal TRIO programs)
- Scholarships provided specifically for low-income students
- Programs to guide parents of low-income students through the higher education experience
- Targeted outreach to recruit students from low-income backgrounds
- Scholarships provided specifically for part-time students
- An on-site child care facility, a partnership with a local facility, and/or subsidies or financial support to help meet the child care needs of students

Part 2

Institution is accessible and affordable to low-income students as demonstrated by one or more of the following indicators:

A. The percentage of entering students that are low-income

B. The graduation/success rate for low-income students

C. The percentage of student financial need met, on average

D. The percentage of students graduating with no interest-bearing student loan debt

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This credit was marked as **Not Pursuing** so Reporting Fields will not be displayed.

Health, Wellbeing & Work

This subcategory seeks to recognize institutions that have incorporated sustainability into their human resources programs and policies. An institution's people define its character and capacity to perform; and so, an institution's achievements can only be as strong as its community. An institution can bolster the strength of its community by making fair and responsible investments in its human capital. Such investments include offering benefits, wages, and other assistance that serve to respectfully and ethically compensate workers and acting to protect and positively affect the health, safety and wellbeing of the campus community. Investment in human resources is integral to the achievement of a healthy and sustainable balance between human capital, natural capital, and financial capital.

Credit
Employee Compensation
Assessing Employee Satisfaction
Wellness Program
Workplace Health and Safety

Employee Compensation

Criteria

Part 1

Institution's employees and/or the employees of its on-site contractors are covered by sustainable compensation standards, guidelines, or policies and/or collective bargaining agreements.

A sustainable compensation (or "living wage") standard, guideline or policy is one that addresses wages and benefits in terms of the ability of employees to meet basic needs. For example, a sustainable compensation policy may index hourly wages to a poverty guideline or to local cost-of-living indicators. A labor market survey, salary survey or similar assessment may be used in conjunction with a basic needs/cost-of-living approach, but is not sufficient on its own to count as a sustainable compensation policy.

Part 2

Institution's employees and/or the employees of its on-site contractors receive sustainable compensation.

To earn points for Part 2 of this credit, an institution must assess employee compensation against one or more of the following:

1. A sustainable compensation standard developed or adopted by a committee with multi-stakeholder representation (i.e. its membership includes faculty, staff, and students and may include Human Resources administrators or other parties). The standard need not be formally adopted by the institution.
2. A sustainable compensation standard that is in use in the institution's locality. The standard may be formal (e.g. a "living wage" ordinance covering public employees) or informal (e.g. a standard adopted by a local, regional or national campaign).
3. An appropriate poverty guideline, threshold or low-income cut-off for a family of four.

For institutions that elect to assess compensation against a poverty guideline, threshold or low-income cut-off, sustainable compensation is defined as wages equivalent to 120 percent of the poverty guideline for a family of four. An institution may offset up to 20 percent of the wage criteria with employer-paid benefits that address basic needs (e.g. healthcare and retirement contributions).

Both parts of this credit are based on the total number of employees working on campus as part of regular and ongoing campus operations, which includes:

- Staff and faculty, i.e. all regular full-time, regular part-time and temporary (or non-regular) employees, including adjunct faculty and graduate student employees (e.g. teaching and research assistants). Institutions may choose to include or omit undergraduate student workers.
- Employees of contractors that work on-site as part of regular and ongoing campus operations. Such contractors may include, but are not limited to, providers of dining/catering, cleaning/janitorial, maintenance, groundskeeping, transportation, and retail services.

Construction and demolition crews and other temporary contracted employees may be excluded.

This credit was marked as **Not Pursuing** so Reporting Fields will not be displayed.

Assessing Employee Satisfaction

Criteria

Institution conducts a survey or other evaluation that allows for anonymous feedback to measure employee satisfaction and engagement. The survey or equivalent may be conducted institution-wide or may be done by individual departments or divisions. The evaluation addresses (but is not limited to) the following areas:

- Job satisfaction
- Learning and advancement opportunities
- Work culture and work/life balance

The institution has a mechanism in place to address issues raised by the evaluation.

This credit was marked as **Not Pursuing** so Reporting Fields will not be displayed.

Wellness Program

Criteria

Institution has a wellness and/or employee assistance program that makes available counseling, referral, and wellbeing services to all members of any of the following groups:

- Students
- Staff
- Faculty

This credit was marked as **Not Pursuing** so Reporting Fields will not be displayed.

Workplace Health and Safety

Criteria

Part 1

Institution has reduced its total number of reportable workplace injuries and occupational disease cases per full-time equivalent (FTE) employee compared to a baseline.

Part 2

Institution has fewer than 5 reportable workplace injuries and occupational disease cases annually per 100 full-time equivalent (FTE) employees.

This credit includes employees of contractors working on-site for whom the institution is liable for workplace safety, for example workers for whom the institution is mandated to report injuries and disease cases by a health and safety authority such as the U.S. Occupational Health and Safety Administration (OSHA) or the Canadian Center for Occupational Health and Safety (CCOHS). Injuries and disease cases include OSHA/CCOHS-reportable fatal and non-fatal injuries (or the equivalent) arising out of or in the course of work and cases of diseases arising from a work-related injury or the work situation or activity (e.g. exposure to harmful chemicals, stress, ergonomic issues). See *Sampling and Data Standards*, below, for further guidance on reporting injuries and disease cases.

This credit was marked as **Not Pursuing** so Reporting Fields will not be displayed.

Investment

This subcategory seeks to recognize institutions that make investment decisions that promote sustainability. Most institutions invest some of their assets in order to generate income. Together, colleges and universities invest hundreds of billions of dollars. Schools with transparent and democratic investment processes promote accountability and engagement by the campus and community. Furthermore, institutions can support sustainability by investing in companies and funds that, in addition to providing a strong rate of return, are committed to social and environmental responsibility. Investing in these industries also supports the development of sustainable products and services. Finally, campuses can engage with the businesses in which they are invested in order to promote sustainable practices.

Throughout this subcategory, the term "sustainable investment" is inclusive of socially responsible, environmentally responsible, ethical, impact, and mission-related investment.

Credit
Committee on Investor Responsibility
Sustainable Investment
Investment Disclosure

Committee on Investor Responsibility

Responsible Party

Richard Demerjian
Director
Office of Environmental Planning and Sustainability

Criteria

Institution has a formally established and active committee on investor responsibility (CIR) or similar body that makes recommendations to fund decision-makers on socially and environmentally responsible investment opportunities across asset classes, including proxy voting. The body has multi-stakeholder representation, which means its membership includes faculty, staff, and students and may include alumni, trustees, and/or other parties.

Institutions for which investments are handled by the university system and/or a separate foundation of the institution should report on the investment policies and activities of those entities.

A general committee that oversees the institution's investments does not count for this credit unless social and environmental responsibility is an explicit part of its mission and/or agenda.

This credit applies to institutions with endowments of US $1 million or larger. Institutions with endowments totaling less than US $1 million may choose to omit this credit.

Submission Note:

Additional information regarding UC policy on sustainable investing is available at:

http://regents.universityofcalifornia.edu/regmeet/sept14/i1.pdf

"---" *indicates that no data was submitted for this field*

Does the institution have a formally established and active committee on investor responsibility (CIR) or similar body that has multi-stakeholder representation and otherwise meets the criteria for this credit?:

Yes

The charter or mission statement of the CIR or other body which reflects social and environmental concerns or a brief description of how the CIR is tasked to address social and environmental concerns:

In 2014 the University of California adopted a proactive sustainable investment strategy that will integrate environmental, social and governance (ESG) factors as a core component of portfolio management. The UC Regents Committee on Investments will serve in the role of overseeing the implementation of these sustainable investment policies and programs.

Members of the CIR, including affiliations and role (e.g. student, faculty, alumni):

The UC Committee on Investment has multi-stakeholder representation including faculty, staff, student, and alumni members.

Yolanda Gorman – Alumni Designate
Abraham Oved – Student Designate
Dan Hare – Faculty Representative
Deidre Acker – Staff Advisor
Donna Coyne – Staff Advisor
William de la Pena MD – Regent
George Keiffer – Regent
Monica Lozano - Regent
Hadi Makarechian - Regent
Norman Patiz - Regent
Sadia Saiffuddin - Regent
Richard Sherman - Regent
Paul Wachter - Regent
Charlene Zettel – Regent

Examples of CIR actions during the previous three years:

Actions taken to implement UC's Sustainable Investment program include:
- Allocate $1 billion over five years for direct investment in climate change solutions
- Adhere to the United nations-supported Principles for Responsible Investment (PRI), the largest University and the first public American University to do so.
- Established a framework for sustanble investment to integrate environmental, social, and governance (ESG) factors as a core component of portfolio management.

The website URL where information about the CIR is available:

http://regents.universityofcalifornia.edu/aar/septi.pdf

Sustainable Investment

Responsible Party

Richard Demerjian
Director
Office of Environmental Planning and Sustainability

Criteria

There are two possible approaches to this credit; institutions may pursue one or both. Institutions for which investments are handled by the university system, a separate foundation of the institution and/or a management company contracted by the institution should report on the combined activities of those entities.

Option 1: Positive Sustainability Investment

Institution invests in one or more of the following:

- **Sustainable industries** (e.g. renewable energy or sustainable forestry). This may include any investment directly in an entire industry sector as well as holdings of companies whose entire business is sustainable (e.g. a manufacturer of wind turbines).
- **Businesses *selected for* exemplary sustainability performance** (e.g. using criteria specified in a sustainable investment policy)**.** This includes investments made, at least in in part, because of a company's social or environmental performance. Existing stock in a company that happens to have socially or environmentally responsible practices should not be included unless the investment decision was based, at least in part, on the company's sustainability performance.
- **Sustainability investment funds** (e.g. a renewable energy or impact investment fund). This may include any fund with a mission of investing in a sustainable sector or industry (or multiple sectors), as well as any fund that is focused on purchasing bonds with sustainable goals.
- **Community development financial institutions** (CDFI) or the equivalent (including funds that invest primarily in CDFIs or the equivalent).
- **Socially responsible mutual funds with positive screens** (or the equivalent). Investment in a socially responsible fund with only negative screens (i.e. one that excludes egregious offenders or certain industries, such as tobacco or weapons manufacturing) does not count for Option 1.
- **Green revolving loan funds** that are funded from the endowment

Option 2: Investor Engagement

Institution has policies and/or practices that meet one or more of the following criteria:

- Has a publicly available sustainable investment policy (e.g. to consider the social and/or environmental impacts of investment decisions in addition to financial considerations)
- Uses its sustainable investment policy to select and guide investment managers
- Has engaged in proxy voting to promote sustainability, either by its CIR or other committee or through the use of guidelines, during the previous three years
- Has filed or co-filed one or more shareholder resolutions that address sustainability or submitted one or more letters about social or environmental responsibility to a company in which it holds investments, during the previous three years

- Has a publicly available investment policy with negative screens, for example to prohibit investment in an industry (e.g. tobacco or weapons manufacturing) or participate in a divestment effort (e.g. targeting fossil fuel production or human rights violations)
- Engages in policy advocacy by participating in investor networks (e.g. Principles for Responsible Investment, Investor Network on Climate Risk, Interfaith Center on Corporate Responsibility) and/or engages in inter-organizational collaborations to share best practices

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Submission Note:

In 2014 the UC Regents adopted actions to guide UC"s investment portfolio using Environmental, Social, and Governance (ESG) factors as a core component of portfolio management.

"---" *indicates that no data was submitted for this field*

Total value of the investment pool:

8,300,000,000 *US/Canadian $*

Value of holdings in each of the following categories::

	Value of Holdings
Sustainable industries (e.g. renewable energy or sustainable forestry)	50,000,000 *US/Canadian $*
Businesses selected for exemplary sustainability performance (e.g. using criteria specified in a sustainable investment policy)	---
Sustainability investment funds (e.g. a renewable energy or impact investment fund)	---
Community development financial institutions (CDFIs) or the equivalent	---
Socially responsible mutual funds with positive screens (or the equivalent)	---
Green revolving loan funds that are funded from the endowment	---

A brief description of the companies, funds, and/or institutions referenced above:

Investments in sustainable forestry funds and clean energy investments via funds.

Does the institution have a publicly available sustainable investment policy?:

Yes

A copy of the sustainable investment policy:

UC Sustainable Investment Strategy September 2014.pdf

The sustainable investment policy:

The University of California will:
- Establish and Implement a framework on sustainable investment
- Integrate Environmental, Social, and Governance (ESG) factors as a core component of portfolio optimization and risk management and will evaluate all strategies for achieving ESG goals as soon as practical, including whether to use divestment.
- Allocate $1 billion over a 5-year period to solutions-oriented investments such as renewable power and fuels, energy efficiency, and /or sustainable food and agriculture.

Does the institution use its sustainable investment policy to select and guide investment managers?:

Yes

A brief description of how the policy is applied, including recent examples:

The policy guides UC Office of Chief Investment Officer in making investments decisions based on these adopted ESG factors including the decision to allocate $1 billion in positive climate-protection investments.

Does the institution's sustainable investment policy include negative screens?:

Yes

A brief description of the negative screens and how they have been implemented:

Yes, The UC Regents have two social responsibility polices that impact investment decisions for any investment held in our investment pools.
• Regent Policy 6301: POLICY TO EXCLUDE SECURITIES OF COMPANIES MANUFACTURING TOBACCO PRODUCTS FROM INDEX FUNDS AND TO CONTINUE EXISTING EXCLUSION FROM ACTIVELY MANAGED FUNDS

http://regents.universityofcalifornia.edu/policies/6301.html

• Regents Policy 6302: POLICY ON DIVESTMENT OF UNIVERSITY HOLDINGS IN COMPANIES WITH BUSINESS OPERATIONS IN SUDAN

http://regents.universityofcalifornia.edu/policies/6302.html

Approximate percentage of the endowment that the negative screens apply to:

100

Has the institution engaged in proxy voting, either by its CIR or other committee or through the use of guidelines, to promote sustainability during the previous three years?:

Yes

A copy of the proxy voting guidelines or proxy record:

A brief description of how managers are adhering to proxy voting guidelines:

Yes, the University has engaged in proxy voting that promotes sustainability during past three years through the use of policy guidelines. The UC Regents Proxy Voting policy guidelines are made public:

http://www.ucop.edu/treasurer/_files/invpol/App_4-8_UCRP-GEP_IPS.pdf

The University's proxies are managed and voted by a third party service provider using their SRI proxy voting guidelines:

http://www.issgovernance.com/file/2014_Policies/2014ISSSRIUSAGuidelines.pdf

&

http://www.issgovernance.com/file/2014_Policies/2014SRIInternational.pdf

Has the institution filed or co-filed one or more shareholder resolutions that address sustainability or submitted one or more letters about social or environmental responsibility to a company in which it holds investments during the previous three years?:

No

Examples of how the institution has engaged with corporations in its portfolio about sustainability issues during the previous three years:

Does the institution engage in policy advocacy by participating in investor networks and/or engaging in inter-organizational collaborations to share best practices?:

Yes

A brief description of the investor networks and/or collaborations:

UC is an active member of:
• Principles for Responsible Investment
• Ceres Investor Network on Climate Risk
• CDP (formerly Carbon Disclosure Project)

The website URL where information about the institution's sustainable investment efforts is available:

http://regents.universityofcalifornia.edu/aar/septi.pd

Investment Disclosure

Responsible Party

Richard Demerjian
Director
Office of Environmental Planning and Sustainability

Criteria

Institution makes a snapshot of its investment holdings available to the public, including the amount invested in each fund and/or company and proxy voting records. The snapshot of holdings is updated at least once per year.

Institutions for which investments are handled by the university system, a separate foundation of the institution and/or a management company contracted by the institution should report on the combined activities of those entities.

"---" *indicates that no data was submitted for this field*

Does the institution make a snapshot of its investment holdings available to the public?:

Yes

The percentage of the total investment pool included in the snapshot of investment holdings:

100

A copy of the investment holdings snapshot:

The website URL where the holdings snapshot is publicly available:

http://www.ucop.edu/investment-office/_files/invpol/GEP_Holdings.pdf

Innovation

Innovation

These credits recognize institutions that are seeking innovative solutions to sustainability challenges and demonstrating sustainability leadership in ways that are not otherwise captured by STARS.

Credit
Innovation 1
Innovation 2
Innovation 3
Innovation 4

Innovation 1

Responsible Party

Brad Hughes
Director, Science Education and Media
Francisco Ayala School of Biological Sciences

Criteria

1. Innovation credits are reserved for new, extraordinary, unique, ground-breaking, or uncommon outcomes, policies, and practices that greatly exceed the highest criterion of an existing STARS credit or are not covered by an existing STARS credit.
2. In general, innovation credits should have roughly similar impacts or be on the same scale as other STARS credits.
3. Outcomes, policies, and practices that are innovative for the institution's region or institution type are eligible for innovation credits.
4. The innovative practice, policy, program, or outcome must have occurred within the three years prior to the anticipated date of submission.
5. The innovative practice or program has to be something that the institution has already done; planned activities do not count.
6. The innovative practice or program should originate from an area within the defined institutional boundary.
7. An institution can only claim a particular activity as an innovation credit once. When re-submitting for a STARS rating, an innovation credit that the institution submitted previously cannot be re-submitted. An institution that has made significant advancements to a project or program that was previously submitted as an innovation may resubmit based on those advancements if the project or program is still considered innovative.
8. Practices, policies, and programs that were once considered innovative but are now widely adopted (e.g. being the first institution to enact a policy 20 years ago that is now common) may not be claimed as innovation credits.
9. Multiple activities or practices whose sum is innovative can be considered for an innovation credit as long as those activities or practices are related. For example, three innovative waste reduction programs in research laboratories could be listed together under a single innovation credit for Greening Laboratories. Listing a series of unrelated accomplishments or events under a single innovation credit is not accepted.
10. While the practices that led to receiving an award may be appropriate for an innovation credit, winning awards and/or high sustainability rankings in other assessments is not, in and of itself, grounds for an innovation credit. When the innovation is part of a partnership, the summary provided must clearly describe the institution's role in the innovation.

To help ensure that the policy, practice, program, or outcome that the institution is claiming for an innovation credit is truly innovative, institutions must submit a letter of affirmation from an individual with relevant expertise in the associated content area. The letter should affirm how the innovation meets the criteria outlined above.

For example, if an institution claims an innovation credit for water use reduction, the institution might solicit a letter from a hydrologist or a water expert from another campus or organization to verify that the strategy is innovative. An innovation may be affirmed internally by campus personnel who are independent of the policy, practice, program, or outcome. Please note that it is not required that the individual be employed in the higher education sector to submit a letter of verification.

The letter should be specific to a single innovation credit. If an institution is claiming three innovation credits, it would solicit and submit three separate letters, with each letter speaking to the specific innovation credit it addresses.

Submission Note:

ESCAPE Director Brad Hughes, Ph.D., is a faculty member in the Department of Ecology and Evolutionary Biology and the School of Education. He directs the M.S. in Biological Sciences and Educational Media Design Program along with the new B.S. in Biology/Education. Dr. Hughes also directs strategic media productions involving the communication of research to the public through sustainable media.

"---" *indicates that no data was submitted for this field*

Title or keywords related to the innovative policy, practice, program, or outcome:

Equitable Science Curriculum for Integrating Arts in Public Education (ESCAPE)

A brief description of the innovative policy, practice, program, or outcome :

The ESCAPE project focuses on how visual and performing arts (VAPA), such as creative movement, may improve children's mastery of scientific concepts. The ESCAPE curriculum addresses scientific misconceptions and reduces cognitive load through VAPA-based instructional techniques involving embodied cognition. Theories of embodied cognition assert that bodily movement can impact levels of cognitive processing, thereby reducing cognitive load, making content more accessible and easier to process. For example, children use dance to model the tilt of the Earth's axis in order to embody the cause of seasons, which are often falsely thought to be due to the Earth's distance from the sun. By circumventing language barriers associated with learning science, this method is thought to be especially effective for English language learners who need support in the sciences the most.

Launched with $6.4 million in National Science Foundation funding, the project aims to improve young students' grasp of Earth, life and physical sciences core concepts aligned with the new Next Generation Science Standards

ESCAPE is an interdisciplinary partnership among UCI research scientists, curriculum designers from the Orange County Department of Education and teaching artists from Segerstrom Center for the Performing Arts. These organizations bring complementary and unique skills and expertise to ESCAPE, and help support 300 teachers from 8 Orange county districts serving more than 40,000 students in the piloting of the project.

The online program is specifically designed for sustainability by using ultra-high definition video production, utilizing cinema quality 4K camera crews for long-term achievable image quality. These methods will sustain implementation fidelity, retraining and recruitment efforts. Furthermore, the modular nature of the online format will allow for growth of the ESCAPE program in the future. Sustainability of the professional development is ensured through the modularity and economic efficiency of a cutting-edge, asynchronous online platform.

Watch the video at:

http://escape.uci.edu/videos/

A brief description of any positive measurable outcomes associated with the innovation (if not reported above):

The ESCAPE project hosted a week-long Earth sciences institute for 150 participants in the summer of 2014. During the institute, participants explored inquiry-based science kits with professional developers from the Orange County Department of Education. Teachers received expert instruction in performance and visual arts-based science classroom techniques by master teaching artists from Segerstrom Center. During the subsequent school year, the artists co-teach three lessons in the teachers' classrooms. Teachers who participate in all three years of the ESCAPE project will earn 220 cumulative hours of professional development, and the project anticipates reaching

about 40,000 students in grades 3-5 during the development phase. This phase will include institutes for those teaching life sciences and physical sciences in 2015 and 2016, respectively. The project will sustain teacher learning beyond 2016 through interactive and immersive online professional development including high-resolution video content, learner interaction through blogs, and self-reflection to support teacher learning of the ESCAPE curriculum. Through the online professional development, ESCAPE curriculum and content could reach teachers nationwide.

See a promotional flier for the 2014 institute at:

http://sites.uci.edu/imagining/files/2014/02/ESCAPEflyerSummer_2014.pdf

A letter of affirmation from an individual with relevant expertise:

IN-1_LetterofAffirmation_ESCAPE.pdf

Which of the following STARS subcategories does the innovation most closely relate to? (Select all that apply up to a maximum of 5):

	Yes or No
Curriculum	Yes
Research	Yes
Campus Engagement	No
Public Engagement	Yes
Air & Climate	No
Buildings	No
Dining Services	No
Energy	No
Grounds	No
Purchasing	No
Transportation	No

Waste	No
Water	No
Coordination, Planning & Governance	No
Diversity & Affordability	Yes
Health, Wellbeing & Work	No
Investment	No

Other topic(s) that the innovation relates to that are not listed above:

Next-generation science standards, science instruction

The website URL where information about the innovation is available :

http://news.uci.edu/press-releases/uci-initiates-nsf-funded-joint-project-utilizing-the-arts-to-improve-grade-school-science-education/

Innovation 2

Responsible Party

Travis Huxman
Professor
Ecology and Evolutionary Biology

Criteria

1. Innovation credits are reserved for new, extraordinary, unique, ground-breaking, or uncommon outcomes, policies, and practices that greatly exceed the highest criterion of an existing STARS credit or are not covered by an existing STARS credit.
2. In general, innovation credits should have roughly similar impacts or be on the same scale as other STARS credits.
3. Outcomes, policies, and practices that are innovative for the institution's region or institution type are eligible for innovation credits.
4. The innovative practice, policy, program, or outcome must have occurred within the three years prior to the anticipated date of submission.
5. The innovative practice or program has to be something that the institution has already done; planned activities do not count.
6. The innovative practice or program should originate from an area within the defined institutional boundary.
7. An institution can only claim a particular activity as an innovation credit once. When re-submitting for a STARS rating, an innovation credit that the institution submitted previously cannot be re-submitted. An institution that has made significant advancements to a project or program that was previously submitted as an innovation may resubmit based on those advancements if the project or program is still considered innovative.
8. Practices, policies, and programs that were once considered innovative but are now widely adopted (e.g. being the first institution to enact a policy 20 years ago that is now common) may not be claimed as innovation credits.
9. Multiple activities or practices whose sum is innovative can be considered for an innovation credit as long as those activities or practices are related. For example, three innovative waste reduction programs in research laboratories could be listed together under a single innovation credit for Greening Laboratories. Listing a series of unrelated accomplishments or events under a single innovation credit is not accepted.
10. While the practices that led to receiving an award may be appropriate for an innovation credit, winning awards and/or high sustainability rankings in other assessments is not, in and of itself, grounds for an innovation credit. When the innovation is part of a partnership, the summary provided must clearly describe the institution's role in the innovation.

To help ensure that the policy, practice, program, or outcome that the institution is claiming for an innovation credit is truly innovative, institutions must submit a letter of affirmation from an individual with relevant expertise in the associated content area. The letter should affirm how the innovation meets the criteria outlined above.

For example, if an institution claims an innovation credit for water use reduction, the institution might solicit a letter from a hydrologist or a water expert from another campus or organization to verify that the strategy is innovative. An innovation may be affirmed internally by campus personnel who are independent of the policy, practice, program, or outcome. Please note that it is not required that the individual be employed in the higher education sector to submit a letter of verification.

The letter should be specific to a single innovation credit. If an institution is claiming three innovation credits, it would solicit and submit three separate letters, with each letter speaking to the specific innovation credit it addresses.

Title or keywords related to the innovative policy, practice, program, or outcome:

Borrego Valley Stewardship Council

A brief description of the innovative policy, practice, program, or outcome:

The Borrego Valley Stewardship Council is a community-based organization that fosters the sustainable development of Borrego Springs and the greater Borrego Valley in Anza-Borrego State Park, the largest of California's state parks. In the summer and fall of 2014, the University of California, Irvine collaboratively convened and coordinated the establishment of this new leadership organization. The Council is a means of community engagement surrounding the strategic development of UCI's academic and outreach programs at a new UCI field station, the Steele/Burnand Anza-Borrego Desert Research Center, along with community alignment and dialog with respect to challenges, opportunities, and threats to the social, environmental, economic, and educational components of the region. Identified in a collaboratively developed charter, signed by members in November 2014, the goal of the Stewardship Council is to guide Borrego Springs in establishing itself as a model community in terms of sound economic planning, beneficial business development, world-class lifelong learning, and exemplary stewardship of the region's cultural, social, and environmental heritage, employing sustainability as an overarching decision-making principle. UCI acts as a "neutral convener and holder of fact," interfacing with more than 20 organizations and numerous individuals as diverse as the local Chamber of Commerce, the Borrego Springs Unified School District, and the California Department of Parks and Recreation.

Borrego Springs is an "early impact" site for stressors associated with global climate change, and UCI's commitment to community engagement in this location presents an opportunity to put scholarship into practice and really live the public service mission of the University of California. Among the priorities initially identified are those of identifying biodiversity impacts of climate change, groundwater depletion, land use planning, agricultural fouling, and renewable energy development, along with sustainability leadership training in the community as well as economic/educational program enhancement. Currently the Council interfaces with UCI through interdisciplinary teams of graduate students who connect research and outreach through education.

A brief description of any positive measurable outcomes associated with the innovation (if not reported above):

Council members adopted a formal charter, which is posted on the Council's Facebook page.

Council members adopted the following mission statement: "Employing the principles of Geotourism as defined by the National Geographic Society, Borrego Springs seeks to be a model desert community in terms of sound economic planning, beneficial year-round tourism, world-class life-long learning, and exemplary stewardship of our cultural, social, and environmental heritage. Geotourism is defined as tourism that sustains or enhances the geographical character of a place -- its environment, culture, aesthetics, heritage, and the well-being of its residents."

The Council held its initial meeting on Nov. 25, 2014, and a subcommittee met again on Feb. 26, 2015, at the Steele/Burnand Anza-Borrego Desert Research Center to discuss a marketing campaign for Borrego Valley. Plans also are underway for an April 2015 symposium at UCI's research center.

A letter of affirmation from an individual with relevant expertise:

IN-2_LetterofAffirmation_BorregoValleyStewardshipCouncil.pdf

Which of the following STARS subcategories does the innovation most closely relate to? (Select all that apply up to a

maximum of five):

	Yes or No
Curriculum	No
Research	Yes
Campus Engagement	Yes
Public Engagement	Yes
Air & Climate	Yes
Buildings	No
Dining Services	No
Energy	No
Grounds	No
Purchasing	No
Transportation	No
Waste	No
Water	Yes
Coordination, Planning & Governance	No
Diversity & Affordability	No
Health, Wellbeing & Work	No
Investment	No

Other topic(s) that the innovation relates to that are not listed above:

geotourism, sustainable development

The website URL where information about the innovation is available:

https://www.facebook.com/pages/Borrego-Valley-Stewardship-Council/1591932284367984

Innovation 3

Responsible Party

Abby Reyes
Director of Academic Sustainability Initiatives
Academic Affairs

Criteria

1. Innovation credits are reserved for new, extraordinary, unique, ground-breaking, or uncommon outcomes, policies, and practices that greatly exceed the highest criterion of an existing STARS credit or are not covered by an existing STARS credit.
2. In general, innovation credits should have roughly similar impacts or be on the same scale as other STARS credits.
3. Outcomes, policies, and practices that are innovative for the institution's region or institution type are eligible for innovation credits.
4. The innovative practice, policy, program, or outcome must have occurred within the three years prior to the anticipated date of submission.
5. The innovative practice or program has to be something that the institution has already done; planned activities do not count.
6. The innovative practice or program should originate from an area within the defined institutional boundary.
7. An institution can only claim a particular activity as an innovation credit once. When re-submitting for a STARS rating, an innovation credit that the institution submitted previously cannot be re-submitted. An institution that has made significant advancements to a project or program that was previously submitted as an innovation may resubmit based on those advancements if the project or program is still considered innovative.
8. Practices, policies, and programs that were once considered innovative but are now widely adopted (e.g. being the first institution to enact a policy 20 years ago that is now common) may not be claimed as innovation credits.
9. Multiple activities or practices whose sum is innovative can be considered for an innovation credit as long as those activities or practices are related. For example, three innovative waste reduction programs in research laboratories could be listed together under a single innovation credit for Greening Laboratories. Listing a series of unrelated accomplishments or events under a single innovation credit is not accepted.
10. While the practices that led to receiving an award may be appropriate for an innovation credit, winning awards and/or high sustainability rankings in other assessments is not, in and of itself, grounds for an innovation credit. When the innovation is part of a partnership, the summary provided must clearly describe the institution's role in the innovation.

To help ensure that the policy, practice, program, or outcome that the institution is claiming for an innovation credit is truly innovative, institutions must submit a letter of affirmation from an individual with relevant expertise in the associated content area. The letter should affirm how the innovation meets the criteria outlined above.

For example, if an institution claims an innovation credit for water use reduction, the institution might solicit a letter from a hydrologist or a water expert from another campus or organization to verify that the strategy is innovative. An innovation may be affirmed internally by campus personnel who are independent of the policy, practice, program, or outcome. Please note that it is not required that the individual be employed in the higher education sector to submit a letter of verification.

The letter should be specific to a single innovation credit. If an institution is claiming three innovation credits, it would solicit and submit three separate letters, with each letter speaking to the specific innovation credit it addresses.

Title or keywords related to the innovative policy, practice, program, or outcome:

Nexus 2014: Global Gathering on Climate, Environmental Health & Justice

A brief description of the innovative policy, practice, program, or outcome:

Nexus 2014: Global Gathering on Climate, Environmental Health & Justice was a high-level convening of leaders of grassroots non-governmental organizations focused on strengthening collaboration and strategies in global environmental health and justice advocacy. The convening focused on the nexus of environmental health and justice work with efforts on climate justice, adaptation and mitigation.

Nexus included training and strategy sessions at the University of California, Irvine from October 6-8, 2014, followed by funder briefings and network meetings in northern California on October 9-10. While the gathering was limited to invited participants only, some sessions were free and open to the public. Over 120 participants from the campus and the community attended the public events, which included panel discussions on Healthy Energy & Clean Air, Community Engagement for Climate Action, Advocacy Strategies Connecting the Local and Global and Health Impacts for Climate Change. There was also an opportunity for research collaboration between community leaders and scholars.

Nexus drew its participants from community-based organizations involved in an environmental health and justice initiative founded in 2005. The initiative provides support to develop new national and international environmental health policies, ensure proper enforcement of existing regulations, develop scientific research and expert opinions on the effects of harmful substances and pollution to inform government and international organizations' decision-making processes, and work with communities that experience harsh environmental health conditions to mitigate adverse effects and enable them to exercise their rights to healthy and sustainable living conditions.

The conveners of Nexus 2014 included:
Pesticide Action Network (PAN)
Health Care Without Harm (HCWH)
Global Alliance for Incinerator Alternatives (GAIA)
IPEN
Jenifer Altman Foundation

In addition to the conveners above, Nexus 2014 was hosted by UCI's Towards a Sustainable 21st Century Initiative with planning support and facilitation by the UCI Sustainability Initiative.

A brief description of any positive measurable outcomes associated with the innovation (if not reported above):

• Nexus included an opportunity for research collaboration between community leaders and scholars. As a result of efforts to connect scholars with the global Nexus leaders, at least two collaborative projects are currently being developed.
• Nexus included a briefing for climate action funders. The standing-room-only briefing connected the 25 Nexus participants from around the world with 25 funding agencies based in the United States, giving the activists an unprecedented platform for access, and the funders an analysis from the front lines of the interconnectedness of climate action, environmental health and justice.
• Nexus included a video briefing regarding the nexus between climate action and environmental health and justice. The 7-minute online video (see link below) is an educational tool that the Nexus program partners are using to share with their constituencies world-wide.
* As a result of Nexus, the sector now has a clearer narrative of the ways that climate change is affecting environmental health and justice challenges globally, and the ways that environmental health and justice solutions are also often climate change solutions. Development of

this narrative was a key challenge in this sector prior to Nexus.

A letter of affirmation from an individual with relevant expertise:

IN-3_LetterofAffirmation_Nexus2014GlobalGathering.pdf

Which of the following STARS subcategories does the innovation most closely relate to? (Select all that apply up to a maximum of five):

	Yes or No
Curriculum	No
Research	Yes
Campus Engagement	No
Public Engagement	Yes
Air & Climate	Yes
Buildings	No
Dining Services	No
Energy	No
Grounds	No
Purchasing	No
Transportation	No
Waste	Yes
Water	No
Coordination, Planning & Governance	No
Diversity & Affordability	Yes

Health, Wellbeing & Work	No
Investment	No

Other topic(s) that the innovation relates to that are not listed above:

Environmental Health, Environmental Justice, Climate Justice

The website URL where information about the innovation is available:

http://www.sustainability.uci.edu/Engagement/Nexus2014/Nexus2014.html

Innovation 4

Responsible Party

Abby Reyes
Director of Academic Sustainability Initiatives
Academic Affairs

Criteria

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2. In general, innovation credits should have roughly similar impacts or be on the same scale as other STARS credits.
3. Outcomes, policies, and practices that are innovative for the institution's region or institution type are eligible for innovation credits.
4. The innovative practice, policy, program, or outcome must have occurred within the three years prior to the anticipated date of submission.
5. The innovative practice or program has to be something that the institution has already done; planned activities do not count.
6. The innovative practice or program should originate from an area within the defined institutional boundary.
7. An institution can only claim a particular activity as an innovation credit once. When re-submitting for a STARS rating, an innovation credit that the institution submitted previously cannot be re-submitted. An institution that has made significant advancements to a project or program that was previously submitted as an innovation may resubmit based on those advancements if the project or program is still considered innovative.
8. Practices, policies, and programs that were once considered innovative but are now widely adopted (e.g. being the first institution to enact a policy 20 years ago that is now common) may not be claimed as innovation credits.
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10. While the practices that led to receiving an award may be appropriate for an innovation credit, winning awards and/or high sustainability rankings in other assessments is not, in and of itself, grounds for an innovation credit. When the innovation is part of a partnership, the summary provided must clearly describe the institution's role in the innovation.

To help ensure that the policy, practice, program, or outcome that the institution is claiming for an innovation credit is truly innovative, institutions must submit a letter of affirmation from an individual with relevant expertise in the associated content area. The letter should affirm how the innovation meets the criteria outlined above.

For example, if an institution claims an innovation credit for water use reduction, the institution might solicit a letter from a hydrologist or a water expert from another campus or organization to verify that the strategy is innovative. An innovation may be affirmed internally by campus personnel who are independent of the policy, practice, program, or outcome. Please note that it is not required that the individual be employed in the higher education sector to submit a letter of verification.

The letter should be specific to a single innovation credit. If an institution is claiming three innovation credits, it would solicit and submit three separate letters, with each letter speaking to the specific innovation credit it addresses.

Title or keywords related to the innovative policy, practice, program, or outcome:

Global Sustainability Minor Sustainability Leadership Training and Retreat Program

A brief description of the innovative policy, practice, program, or outcome:

The UCI Sustainability Initiative and Global Sustainability Resource Center (GSRC) hosted the first ever leadership training and retreat for undergraduate students enrolled in the Global Sustainability Minor. The training and retreat are the inaugural activities in the Global Sustainability Resource Center's new training program. The retreat took place over the Martin Luther King Jr. holiday weekend at the Steele/Burnand Anza-Borrego Desert Research Center in Borrego Springs, California, and involved 26 students and 6 faculty and staff (maximum capacity for the residential facility). Twenty-six additional students are on the waitlist for another retreat in the future.

The retreat purpose was to develop students' sustainability leadership capacity, provide time for essential conversations about issues that concern students, build community, and be in nature. In addition, sustainable and delicious food was a central theme of the retreat. The retreat was facilitated by the SERES Center for Sustainability Learning and Leadership, which is based in Guatemala, with the support of one of the GSRC co-Program Managers, who is also a SERES alum. An international eco-chef from Soul Cocina led the FoodScaptes curriculum during the weekend. The training portion of the retreat built students' skills in strategic questioning, community visioning, action planning, and climate communication. This retreat was the first in a series of activities under the GSRC's new transformational leadership training program. In December 2014, the White House's Office of Science and Technology Policy included this program as an external commitment during its launch of the new national climate literacy and education initiative.

A brief description of any positive measurable outcomes associated with the innovation (if not reported above):

• The retreat enabled UCI to identify 52 of the current UCI students enrolled in the Global Sustainability Minor at all undergraduate levels; the retreat trained 26 of these students (venue capacity), with another 26 on the waitlist for a future offering.
• The retreat equipped 26 of these student scholars with skills in strategic questioning, community and personal vision, and action planning.
• The retreat activities also strengthened the 26 students' critical lens on local-global solidarity and deepened awareness of the interdependence of all life.
• The retreat enabled UCI to identify key student leaders for further leadership training (2 students have been selected to receive facilitators' training in anticipation of their roles as facilitators of future activities in the training program, including working with high school students in the Borrego Springs region and leading the 2015 Summer Institute for Sustainability Leadership).
• Out of the 26 attendees, 100% ranked the retreat as high in relation to their learning experience as students at UCI, and over 60% have subsequently increased their involvement in sustainability actions on campus, including a subset of students who have undertaken substantial leadership commitments in student clubs, the Student Advisory Council on Sustainability Education, and a statewide student coalition.

A letter of affirmation from an individual with relevant expertise:

IN-4_LetterofAffirmation_GlobalSustainabilityMinor.pdf

Which of the following STARS subcategories does the innovation most closely relate to? (Select all that apply up to a maximum of five):

	Yes or No
Curriculum	Yes
Research	No
Campus Engagement	Yes
Public Engagement	Yes
Air & Climate	Yes
Buildings	No
Dining Services	No
Energy	No
Grounds	No
Purchasing	No
Transportation	No
Waste	No
Water	No
Coordination, Planning & Governance	No
Diversity & Affordability	Yes
Health, Wellbeing & Work	No
Investment	No

Other topic(s) that the innovation relates to that are not listed above:

Youth empowerment, transformational leadership, community action planning & training

The website URL where information about the innovation is available:

https://ucigsrc.wordpress.com/2015/01/27/global-sustainability-minors-breaking-boundaries/