



University of Massachusetts Amherst

The following information was submitted through the [STARS Reporting Tool](#).

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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

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

Reason for excluding agricultural school:

Reason for excluding medical school:

Reason for excluding pharmacy school:

Reason for excluding public health school:

Reason for excluding veterinary school:

Reason for excluding satellite campus:

Our first satellite campus for the entire Five Campus UMass System was opened in Springfield, MA on March 25th, 2014. At present it comprises only a welcome center, and students do not actually take any classes at the satellite campus. We have therefore excluded it from the scope of this report.

Reason for excluding hospital:

Reason for excluding farm:

Reason for excluding agricultural experiment station:

Narrative:

Operational Characteristics

Criteria

n/a

Submission Note:

100% of all heating energy and chilled water is generated at the Central Heating Plant which uses natural gas, liquid natural gas, fuel oil #2, and ULSD fuel.

Approximately 73% of the campus electricity is generated at the Central Heating Plant. The other 27% comes from the ISO-New England Utility grid.

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

Endowment size:

272,087,452 US/Canadian \$

Total campus area:

1,463 Acres

IECC climate region:

Cold

Locale:

Large town

Gross floor area of building space:

12,239,033 Gross Square Feet

Conditioned floor area:

Floor area of laboratory space:

1,360,282 Square Feet

Floor area of healthcare space:

68,362 Square Feet

Floor area of other energy intensive space:

1,427,346 Square Feet

Floor area of residential space:

4,006,022 *Square Feet*

Electricity use by source::

	Percentage of total electricity use (0-100)
Biomass	---
Coal	---
Geothermal	---
Hydro	---
Natural gas	---
Nuclear	---
Solar photovoltaic	---
Wind	---
Other (please specify and explain below)	---

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

Energy used for heating buildings, by source::

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

Geothermal	---
Natural gas	---
Other (please specify and explain below)	---

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

Academics and Demographics

Criteria

n/a

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

Number of academic divisions:

9

Number of academic departments (or the equivalent):

56

Full-time equivalent enrollment:

27,106.90

Full-time equivalent of employees:

6,271.10

Full-time equivalent of distance education students:

798

Total number of undergraduate students:

22,134

Total number of graduate students:

6,384

Number of degree-seeking students:

27,520

Number of non-credit students:

998

Number of employees:

6,271

Number of residential students:

13,086

Number of residential employees:

0

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.

From the institution:

As the flagship campus of the Commonwealth, UMass Amherst has been a leader in agricultural research and green education since our founding as a land grant institution in 1863.

The university gives students the opportunity to make a serious commitment to pursuing in-depth study in the field. More than a third of our majors offer opportunities to learn and practice sustainability across disciplines, with courses taught by faculty members who are passionate about changing society and protecting our environment. We offer more than 25 sustainability-related undergraduate majors, which include over 300 sustainability-related courses. At the graduate level the university offers multiple programs with a sustainability focus, including an M.S. in Environmental Conservation, an M.S. in Design & Historic Conservation, and a Masters in Sustainability Science.

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

Responsible Party

Craig Nicolson

Director of Sustainability Programs
Environmental Conservation

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	3,342	0.10
Number of sustainability courses offered	107	0
Number of courses offered that include sustainability	109	0

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

29

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

52

Number of years covered by the data:

One

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

[SustainabilityCourseMasterlist-2013.pdf](#)

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

see PDF inventory list uploaded with this credit info.

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

<http://www.umass.edu/sustainability/class-list>

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

We developed a definition of sustainability to decide which courses at the University counted as sustainability-focused or sustainability-related. We canvassed every department head of the university and asked them to identify the courses in their programs that fit these definitions. The results from all the departments with sustainability courses were then compiled into a master database.

On an ongoing basis, each semester we review the available course offerings from a set of departments which offer sustainability-related and -focused courses and make a list of these courses publicly available.

Our most current assessment focused only on undergraduate courses, so we have not included grad courses in our totals above. We have also chosen to interpret the criteria conservatively... so for example we do not include internships or practica or independent studies, even though we have a good number of students enrolled in these kinds of immersive learning opportunities. They are harder to track, and rather than estimate them we have chosen not to count them.

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):

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

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

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

Yes

Does the institution designate sustainability courses on student transcripts?:

No

Learning Outcomes

Responsible Party

Craig Nicolson

Director of Sustainability Programs
Environmental Conservation

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:

In this 2015 Data Collector submission, we're counting all students who received a Bachelors or Associates degree from a program that included required courses which have at least one of the listed sustainability learning outcomes (or has them for the program as a whole, for those with publicly listed Learning Outcomes).

Data are taken from the OIR Dept Profiles | Campus Detail | Degrees Awarded for 2013/14 (most recent year of data available).

and other data taken from the OIR Factsheet:

http://www.umass.edu/oir/sites/default/files/publications/factsheets/degrees/FS_de_02b.pdf

The file uploaded doesn't duplicate listing all the courses (see lists in ER-6 and ER-7), but instead lists the undergrad degree programs with sustainability focus.

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

3,099

Total number of graduates from degree programs:

5,733

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

[Sustainability Programs for ER-9.pdf](#)

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

Anthropology
Arboriculture & Community Forest Management (Associate's Degree)
Architecture
Art History
Bachelor's Degree with Individual Concentration (BDIC) (B.A., B.S.)
Biology (B.A., B.S.)
Building & Construction Technology
Chemistry
Civil Engineering
Communication
Earth Systems
Economics
Environmental Design
Environmental Science
Food Science
Geography (B.A., B.S.)
Geology (B.A., B.S.)
History
Hospitality & Tourism Management
Landscape Architecture
Landscape Contracting (Associate's Degree)
Management
Marketing
Mechanical Engineering
Microbiology (B.A., B.S.)
Natural Resources Conservation
Nutrition
Physics (B.A., B.S.)
Plant, Soil & Insect Sciences
Political Science
Public Health Sciences
Resource Economics
Social Thought and Political Economy

Sociology

Sustainable Food and Farming (Associate's Degree and B.S.)

Sustainable Horticulture (Associate's Degree and B.S.)

University Without Walls (B.A., B.S.)

Environmental Conservation (*grad prog, not counted in total)

Fish Passage Engineering Ecohydrology (*grad prog, not counted in total)

Geosciences (*grad prog, not counted in total)

Green Building Professional Masters (*grad prog, not counted in total)

Public Policy and Administration (*grad, environmental policy specialization, not counted)

Sustainability Science (*grad prog, not counted in total)

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

Students who successfully complete the MS in Sustainability Science will graduate with the following knowledge and skills:

Knowledge: Students will...

- o understand the theories and definitions of sustainability (i.e. historical and current theorizing about the interplay between "people, planet and profits")
- o understand the key principles of assessing ecosystem services;
- o grasp the broad historical contours of the industrial revolution, the scientific-technological revolution, and urbanization;
- o be familiar with the thought of at least 4 seminal thinkers in the arena of sustainability
- o recognize the ethical, social and environmental consequences of environmentally-relevant technologies.
- o develop in-depth understanding of their particular concentration (Sustainable Food Systems and Agriculture; Water Sustainability; Urban Sustainability; and Environmental Quality)

Skills: Students will demonstrate competence in...

- o systems analysis (the ability to identify the interrelated environmental, economic, social and policy dimensions of a given environmental challenge);
- o explaining the linkages between ecosystem services, economic prosperity, and human/cultural flourishing;
- o carrying out quantitative analyses of sustainability (data gathering, holistic life-cycle costing, energy/carbon accounting)
- o applying course knowledge and theory to real-world problem-solving
- o communicating both within and outside their field (writing, oral presentation, and internet-based communication)
- o project management skills

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

<http://www.umass.edu/sustainability/academics/majors>

Undergraduate Program

Responsible Party

Darci Connor Maresca

Project Manager, Sustainability Programming
ECo

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*.

"---" 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):

Sustainable Food and Farming

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

If you care about: 1) good food, 2) small farms, and 3) local solutions to food, climate and energy challenges, you should explore our 2-year, 4-year, and online certificate programs.

Students in the Sustainable Food and Farming major prepare for work in diverse fields such as:

growing and marketing real food,
farm-based educational systems,
food advocacy, community development and public policy.

You can concentrate on a diverse range of work opportunities from permaculture and organic farming to medicinal herbs and community food systems.

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

<http://stockbridge.cns.umass.edu/program/sustainable-food-farming>

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

Environmental Design

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

The Environmental Design major gives students the opportunity to consider a variety of perspectives on creating a more sustainable world through planning and design. The curriculum is flexible and interdisciplinary, allowing a student to broadly explore ways of envisioning sustainable communities. Students will become familiar with the theories and techniques of design and planning for creating sustainable communities, conserving the environment, and responding to other social, cultural, economic and political challenges of the built environment.

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

http://www.umass.edu/larp/environmental_design/

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

Natural Resource Conservation

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

In the Natural Resources Conservation major students learn about the ecology of terrestrial and aquatic ecosystems, and how these systems can be managed to conserve biodiversity and protect ecosystem functions while providing sustainable benefits to society. The program provides students with rigorous academic training in the natural, conservation, and social sciences with hands-on field skills and field experiences.

Students in the Natural Resources Conservation major focus in one of the following six concentrations:

1. Environmental Conservation
2. Fisheries Ecology & Conservation
3. Forest Ecology & Conservation
4. Urban Forestry & Arboriculture
5. Water Resources
6. Wildlife Ecology & Conservation

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

<https://eco.umass.edu/degree-programs/undergraduate-programs/natural-resources-conservation/>

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

Architecture,

<http://www.umass.edu/architecture/content/bachelor-fine-arts-architecture>

Bachelor's Degree with Individual Concentration (BDIC),

<https://www.bdic.umass.edu/content/bdic-major>

Building & Construction Technology,

<https://eco.umass.edu/degree-programs/undergraduate-programs/building-and-construction-technology/>

Civil & Environmental Engineering,

<http://cee.umass.edu/undergraduate-program>

Earth Systems,

<http://www.geo.umass.edu/programs/undergraduate/earth-systems>

Environmental Science,

<https://eco.umass.edu/degree-programs/undergraduate-programs/environmental-science/>

Geography,

<http://www.geo.umass.edu/programs/undergraduate/geography>

Landscape Architecture,

<http://www.umass.edu/larp/academic-programs/undergraduate-degrees/landscape-architecture-bs>

Management, Sustainable Business Practice,

<https://www.isenberg.umass.edu/programs/undergraduate/on-campus/majors/management>

Nutrition,

<http://www.umass.edu/sustainability/majors/nutrition>

Plant, Soil, & Insect Sciences,

<http://stockbridge.cns.umass.edu/program/plant-soil-and-insect-sciences>

Public Health Sciences Program,

<http://www.umass.edu/sphhs/public-health/academics/undergraduate-program>

Resource Economics,

<http://www.umass.edu/resec/undergraduate/index.shtml>

Sustainable Horticulture,

<http://stockbridge.cns.umass.edu/bachelors/sustainable-horticulture>

UWW Sustainability Studies,

<http://www.umass.edu/uww/areas-study/sustainability-studies>

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):

Environmental Science; Wildlife and Fisheries Conservation; Sustainable Community Development (3 of our 8-ish minors)

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

see websites

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

<http://www.umass.edu/>

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

Sustainable Food & Farming Online Certificate

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

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The 15-credit Certificate in Sustainable Food and Farming is designed for adults looking to make a career change, returning Veterans, or those of you pursuing a lifelong interest related to food, gardening, homesteading or farming.

The Certificate may be completed entirely ONLINE, but many of our courses are also available on campus. The certificate has helped prepare students in three broad areas of study:

Sustainable Farming/Marketing and Homesteading
Agricultural and Farm-based Education
Public Policy, Community Development and Advocacy

Our online program has been particularly attractive to the fastest growing farm demographic in New England, women-owned and managed farms. We know how busy your lives can be, so our online classes may be taken on your own schedule.

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

<https://stockbridge.cns.umass.edu/SFF-Certificate>

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

Sustainable Business Practice Certificate

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

Isenberg's Sustainable Business Practice Certificate will give you the knowledge you need. You'll be able to help companies implement socially, environmentally and economically responsible business practices that are also strategic, savvy, innovative and cost effective. And you'll learn how to identify business opportunities related to sustainability.

The program is flexible enough to fit your needs and rigorous enough to make you competitive. Learn from experts—the same faculty who teach on campus—who will introduce you to the challenges of sustainability and how business organizations can play a constructive role in addressing them. As part of the Isenberg School of Management, you'll experience a world-renown business education and a strong alumni network.

To earn a Sustainable Business Practice Certificate, you take 5 courses adding up to 15 credits. You can track your progress with the certificate checklist.

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

<https://www.isenberg.umass.edu/programs/certificates/sustainable-business>

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

Responsible Party

Darci Connor Maresca

Project Manager, Sustainability Programming
ECo

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*.

"---" 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 graduate students?:

Yes

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

Master of Science in Sustainability Science

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

The Sustainability Science program prepares students professionally for a broad range of sustainability-focused careers in industry, government, or the non-profit sector. Students will graduate with: (1) a systems-based foundation for analyzing current environmental challenges; (2) pragmatic training and field experiences; (3) critical thinking and communications skills; and (4) knowledge and understanding of the interrelated scientific, social, economic and political underpinnings of environmental problems, solutions, and practices. - See more at:

<http://eco.umass.edu/degree-programs/sustainability-science-masters/#sthash.uInGORqa.dpuf>

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

[STARS Reporting Tool | AASHE](#)

<http://eco.umass.edu/degree-programs/sustainability-science-masters/>

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

Master of Science and PhD in Environmental Conservation

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

The Graduate Program in Environmental Conservation intends to play a significant role in this transformation.

Recognizing the growing complexity of environmental conservation, the Program has evolved into a broad, multi-faceted degree program, with diverse opportunities for emphasizing 1) wildlife, fish and conservation biology, 2) forest resources and arboriculture, 3) water, wetlands and watersheds, 4) human dimensions and environmental policy, or 5) building systems, with options for a thesis (research) or professional (non-thesis) degree in any of these areas of concentration. To support these degree programs, there are currently more than 50 courses offered within the Program taught by ECo faculty.

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

<http://eco.umass.edu/degree-programs/graduate-programs/>

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

Master of Science in Geography

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

The geography program has special strengths in Climatology & Paleoclimatology, Natural Hazards and Disasters, Geomorphology, Land and Water Management, Economic Geography, Urban Geography, Development and Conservation, Environmental Perception, and Geographic Information Systems (GIS), Earth System Modeling, and Remote Sensing. Specific problems in these areas may be explored in the regional contexts of North America, Europe, New England, Latin America, China, Southeast Asia, and the Arctic

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

<http://www.geo.umass.edu/programs/grad.html>

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

Architecture,

<http://www.umass.edu/architecture/content/master-architecture>

Civil & Environmental Engineering,

<http://cee.umass.edu/graduate-program-areas>

Design in Historic Preservation,

<http://www.umass.edu/architecture/content/master-science-design-historic-preservation>

Environmental Health Sciences,

<http://www.umass.edu/sphhs/environmental-health-sciences>

Geosciences,

<http://www.geo.umass.edu/programs/graduate/geology>

Landscape Architecture,

<http://www.umass.edu/larp/academics/graduate-degrees/landscape-architecture-mla>

Mechanical and Industrial Engineering,

<http://mie.umass.edu/mie-graduate-programs>

Plant Biology,

<http://www.bio.umass.edu/plantbio/>

Public Policy & Administration,

<http://www.masspolicy.org/academics/master-public-policy-and-administration>

Regional Planning,

<http://www.umass.edu/larp/academics/graduate-degrees/regional-planning-mrp>

Resource Economics,

<http://www.umass.edu/resec/graduate/index.shtml>

Does the institution offer one or more graduate-level sustainability-focused minors, concentrations or certificates?:

Yes

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

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

The LEED Professional Credentials indicate professional excellence and a strong depth of knowledge as well as practical understanding of the LEED Rating Systems and how they apply to the high-performance design and construction of the built environment. Preparing to take the LEED Green Associate and AP exams requires more than taking one course; it is a process that involves acquisition of disciplinary knowledge and understanding of complex building and environmental systems. This course introduces core concepts of the USGBC LEED Rating Systems and assists students with study and preparation for the LEED Green Associate exam.

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

<http://www.umass.edu/sustainability/class/st-sustainable-building-leed-certification>

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

Graduate Certificate/Concentration in Wind Power Engineering

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

The Graduate Certificate/Concentration in Wind Power Engineering is the first ever wind energy certificate/concentration program in the U.S. This 15 credit program offers a unique opportunity for students or professionals to obtain in-depth knowledge of all aspects of wind energy including engineering topics (aerodynamics, structures and loads, design, electrical issues, support structures, wind and wave external conditions) as well as critical non-engineering issues (economics, permitting, standards, environmental impacts, policy). Students also have the flexibility to specialize in certain aspects of wind energy that are of particular interest. This program is ideally suited for: undergraduate engineers interested in graduate-level studies in wind energy industry, professionals in other industries interested in transitioning into the wind energy industry, and current industry practitioners interested in additional education and credentials.

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

<http://www.umass.edu/windenergy/study/graduatecertificate>

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

Integrative Graduate Education and Research Traineeship (IGERT): Offshore Wind Energy Engineering, Environmental Science, & Policy

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

The University of Massachusetts Amherst recently received a \$3.2 million grant from the National Science Foundation Integrative Graduate Education and Research Traineeship (IGERT) program to start an interdisciplinary graduate program in Offshore Wind Energy. The new graduate program will train 24 doctoral students over the course of five years in the technology, environmental implications, and social/economic/regulatory challenges of offshore wind farms. The multidisciplinary program will feature more than 20 faculty members from nine UMass Amherst departments in the College of Engineering, College of Natural Sciences, School of Management, and College of Social and Behavioral Science.

The overarching goal of this IGERT is to educate a new generation of researchers able to integrate engineering, environmental science, and social science to better position the U.S. in global competitiveness in wind energy. Specifically the overall program goals are to:

Encourage and motivate students, particularly those from underrepresented groups, to pursue research careers in renewable energy. Create an environment in which students and faculty engage in transformative interdisciplinary research. Provide students with a curriculum that achieves both deep knowledge in their chosen field and inter-disciplinary knowledge across fields related to wind energy including exposure to state-of-the-art topics through an innovative real-time case study (on a proposed wind installation in Hull, MA), international exchanges, and training in participatory communication. Provide students with skills and strategies for professional success including mentoring and activities centered on career guidance and ethics.

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

<https://windenergyigert.umass.edu/igert-program>

The name and website URLs of all other graduate-level, sustainability-focused minors, concentrations and certificates:

Immersive Experience

Responsible Party

Craig Nicolson

Director of Sustainability Programs
Environmental Conservation

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:

In addition to Sirius, the campus also partners with Yestermorrow, a Design/Build School in Waitsfield VT. Yestermorrow offers semester-long, in-residence full immersion, credit bearing opportunities to explore interdisciplinary, whole-systems thinking. Students develop fundamental technical skills in architecture and construction through a real world project.

See

<https://yestermorrow.org/>

"---" 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:

The Sirius EcoVillage Immersion Program in Shutesbury, Mass. is a 15 minute drive from campus and offers a unique experience to those who are interested in community living, permaculture, natural building, ecovillage life, and exploring a spiritual practice.

Participants learn sustainable approaches to living and working in the material world through a hands-on work gardening and green

building practicum each morning (5 days per week), sustainability classes in the afternoon, and engaging with community members and/or quiet time during the evening. Thursday nights are weekly community meetings which entail census decision making and non-violent conflict resolution strategies.

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

<http://www.siriuscommunity.org/immersion-program/>

Sustainability Literacy Assessment

Responsible Party

Craig Nicolson

Director of Sustainability Programs
Environmental Conservation

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.

Submission Note:

Although individual faculty occasionally survey students in their individual classes to test sustainability literacy (e.g., Craig Nicolson in EnviSci 445; Lena Fletcher in NRC 185; Robert Ryan in LARP 687; Erin Baker in M&IE), we have not yet implemented our institution-wide plan to assess Sust Literacy comprehensively.

We are in the early stages of discussing the value of a General Education requirement in Sustainability, and as we move forward with this initiative, one aspect of our planning includes an assessment (likely using the Ohio State SKA instrument).

"---" 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

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

0

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

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

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

Update...

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

Update...

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

Update...

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

Incentives for Developing Courses

Responsible Party

Craig Nicolson

Director of Sustainability Programs
Environmental Conservation

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.

Submission Note:

Details on the Library Sustainability Curriculum Initiative mini-grant process:

<http://www.library.umass.edu/about-the-libraries/news/press-releases-2013/sustainability-grants/>

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

Does the institution have an ongoing incentives program or programs that meet the criteria for this credit?:

Yes

A brief description of the program(s), including positive outcomes during the previous three years:

Both the College of Natural Sciences and the Library have mini-grant programs for faculty who want to develop courses related to sustainability. The purpose of the College of Natural Sciences (CNS)' mini-grant program is to provide funds to CNS faculty who wish to pursue opportunities to increase their effectiveness as a researcher or instructor. The goal of the program is to improve the quality of research and teaching within the College. The Library, in partnership with the Center for Teaching and Faculty Development has developed a Sustainability Curriculum Initiative, now in its third year (2014/15).

A brief description of the incentives that faculty members who participate in the program(s) receive:

Small curriculum development grants, typically ranging from \$1000 to \$1500, are awarded on a competitive basis for proposals supporting the stated purpose and goal.

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

<http://www.cns.umass.edu/faculty/cns-teaching-mini-grants>

Campus as a Living Laboratory

Responsible Party

Ezra Small
Sustainability Manager
Physical Plant

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.

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

Is the institution utilizing the campus as a living laboratory in the following areas?:

	Yes or No
--	-----------

Air & Climate	No
Buildings	Yes
Dining Services/Food	Yes
Energy	Yes
Grounds	Yes
Purchasing	Yes
Transportation	Yes
Waste	Yes
Water	Yes
Coordination, Planning & Governance	Yes
Diversity & Affordability	Yes
Health, Wellbeing & Work	Yes
Investment	Yes
Public Engagement	No
Other	No

A brief description of how the institution is using the campus as a living laboratory for Air & Climate and the positive outcomes associated with the work:

A brief description of how the institution is using the campus as a living laboratory for Buildings and the positive outcomes associated with the work:

Campus Planning supports a cohort of Green Building Researchers who work to advance green building policies and provide in-house LEED consulting for new construction and major renovation projects on campus. The Green Building Researchers assist the Green Building Committee in developing and updating the Green Building Guidelines for UMass, an official green building guidebook for all [STARS Reporting Tool](#) | [AASHE](#)

major construction projects.

Nariman Mostafavi is a Ph.D. student in Building and Construction Technology at UMass. He joined the Campus Planning in January 2013 as a Graduate Green Building Researcher. Nariman currently works on developing a campus-wide sustainability analysis tool and is tracking campus resource use at the building level.

Somayeh Tabatabaee is a Ph.D. student in Building and Construction Technology at UMass and joined Campus Planning in January 2013 as a Graduate Green Building Researcher. Somayeh is currently working on a case for a Net Zero Energy Building on campus and is developing a database of campus LEED projects.

Soroush Farzinmoghadam is a graduate student pursuing PhD in Regional Planning and Master of Architecture at UMass and joined Campus Planning in January 2013 as a Graduate Green Building Researcher. Soroush currently works on developing a campus-wide sustainability analysis tool, automation of building Energy Utilization Intensity benchmarking and is developing Interactive LEED Explorer and Sustainability Explorer maps.

Green Roofs: Prof Craig Nicolson -- ES445, and Prof Paige Warren (Honors thesis advisor). One of the major projects in ES445 (Environmental Problem Solving) involves writing a detailed project proposal for a project that will improve our sustainability practices at UMass Amherst. In 2014, one of the student teams researched green roofs, and came up with a proposal to install green roofs on two campus buildings. In a separate project, Prof Paige Warren oversaw an honors student writing her thesis on ecological research to look at seedling establishment for green roofs on 6 different buildings on our campus.

A brief description of how the institution is using the campus as a living laboratory for Dining Services/Food and the positive outcomes associated with the work:

UMass Amherst has a Real Food Challenge Internship Program (for credit). Our Chancellor has signed the Real Food Challenge, which makes UMass the largest campus dining program (serving about 45,000 meals per day) to sign the agreement. The challenge is a commitment for the institution assuring that 20% of the universities' food purchases come from socially responsible farms and food businesses--what they call 'real food.'

Students work within an internship team each semester supported by UMass Dining/Auxiliary to audit UMass Dining procurement using the Real Food Calculator.

A brief description of how the institution is using the campus as a living laboratory for Energy and the positive outcomes associated with the work:

Students regularly submit energy conservation and renewable energy related proposals to the campus Sustainability Innovation and Engagement Fund. One specific proposal which was completed in January 2015 was the installation of occupancy sensors in a number of classrooms in the Isenberg School of Management. The student used data loggers set in the classrooms for a period of two weeks to analyze the amount of time the lights remained on compared to the times that the classroom was scheduled to be occupied. Once this data had been collected, she was able to determine the avoided cost savings achieved through efficient use of the lights, and was able to estimate the cost and return on investment of installing the occupancy sensor that would make create that enhanced efficiency.

<http://www.umass.edu/sustainability/get-involved/sustainability-innovation-engagement-fund>

iCons Program: Students in the Integrated Concentration in Science focus on either energy or biomedicine and have been assigned to develop energy flow diagrams of the entire UMass campus. They regularly tie in campus energy systems when studying the following [STARS Reporting Tool](#) | [AASHE](#)

topics: Renewable Energy Biomass-fired Power Plants, UMass Power Plant Efficiencies, Amherst Solar Energy Farm (new), Fuel Cells and Soldier Power (new), and Nuclear Energy.

<http://www.cns.umass.edu/icons-program/>

Professor Craig Nicolson teaches ES445, ECO 697PS analysis of campus energy system. In these two classes, students have worked on projects analyzing the energy use in residence halls and other buildings at UMass Amherst, making recommendations to the Director of Housing for how energy use and emissions can be reduced. UMass has over 14,000 students living on campus, and in Res Hall energy use accounts for a significant portion of our campus emissions.

A brief description of how the institution is using the campus as a living laboratory for Grounds and the positive outcomes associated with the work:

Professor Paige Warren teaches NRC 564 Habitat Management where Students develop a habitat management plans for the campus to promote biodiversity, learning about the principles of Conservation Biology with the campus as the case study.

The Arboriculture program trains students using campus trees and arboretum. These students intern with the Grounds division of the Physical Plant.

A brief description of how the institution is using the campus as a living laboratory for Purchasing and the positive outcomes associated with the work:

UMass Amherst's Green Office Program offers students a chance to receive graded credit for analyzing and improving the purchasing throughout the many academic and administrative offices on campus. Acting as consultants, they are able to work with office managers to develop strategies and improve best practices for reducing both the amount of paper purchased and the amount that gets thrown away as well as develop and provide a green purchasing guide made up of products that are available to purchase through the campus vendors such as Office Max.

One effective way that they are able to do that is by communicating and working directly with our paper company's campus representative from Office Max. They are able to provide raw purchasing data over a period of months, which the students are then able to analyze and synthesize into useful charts and figures. They can then be used to educate offices on the financial and environmental merits of something as simple as reducing the amount of paper an office purchases on a monthly basis.

A brief description of how the institution is using the campus as a living laboratory for Transportation and the positive outcomes associated with the work:

At UMass Amherst we have a Bike Share Program that was started by a student in 2010. This program allows students to rent bikes for 24 hours for free in the Fall and Spring. Student use these bikes to commute around campus instead of driving. In the Spring of 2013 a student in our Sustainability Fellowship Program helped to coordinate the Bike Share Program. This student researched other schools' bicycle sharing programs to learn about different ways to make our program more efficient. One example of this was the idea of using a computer to keep track of information so that it would be easier to keep track of the bikes. This student wrote up a report about everything he learned, he received a grade and credit. Students serve on the Bike Share committee and the Bicycle Advisory Committee (BAC).

UMass Amherst students are eligible to participate in the NuRide Program. This program offers incentives to anyone who takes the bus, rides their bike or carpools. During the Spring and Fall of 2013 a student in our Sustainability Fellowship Program researched the ways to spread awareness, increase membership and the benefits of the NuRide Program. The implementation of his research discouraged people from driving single-occupancy vehicles and burning fossil fuels. This student wrote a report about what he learned and received credit and a grade.

Students in Eleni Christofa's Sustainability Transportation class in the Civil & Environmental Engineering Department learn about regional and campus transportation issues and propose solutions to them through the Sustainability Fund.

<http://cee.umass.edu/faculty/elena-christofa>

A brief description of how the institution is using the campus as a living laboratory for Waste and the positive outcomes associated with the work:

At UMass Amherst we have a bicycle compost-pick-up program called the Minute Riders Program. In the Fall of 2013 a student in the Sustainability Fellowship Program did a lot of research and submitted a proposal for this bicycle compost-pick-up program. The proposal was approved and now over 25 offices participate in the Minute Riders Program. The compost is brought to Dining locations and added to the 1400 tons of food waste on campus each year. The student who wrote the proposal received credit and a grade for all of the research he did.

The New2U Reuse Program is an annual student run effort that is held during student move out weekend and move in weekend the following year. The program is designed to collect unwanted dorm room items that would otherwise be thrown away. The items are then sorted, catalogued, priced, and sold at a reduced price to students moving in the following year. Students are responsible for organizing the collection area, which must be large enough to accommodate material from approximately 5,000 students. They must then arrange a storage area for all collected material over the summer break, where they are also responsible for cleaning and pricing all of the items. The final stage of the program is a tag sale in September. Student leaders must register volunteers over the three day sale. They must also secure a room large enough for the sale. Students are responsible for securing funding for the program, and last year, generated over \$4500 in revenue.

The Sustainable UMass Fellows program has Waste & Recycling Fellows each year who conduct research and implement projects that reduce waste on campus. Projects range from the Minute Riders Program to New2U Tag Sale (below) to composting and electronic recycling programs.

The undergraduate chapter of the UMass NetImpact Group has focused on clothing recycling and candy bar wrapper recycling in the last two years, partnering with UMass Dining and Residential Life to establish collection points for these items.

At UMass Amherst we have a very strong Eco-Rep Program. Student in the Eco-Rep program receive 2 credits for studying different aspects of sustainability and participating in peer education, teaching their fellow-students about sustainability. For example, in 2014 Eco-Rep students collected electronic waste in the lobbies of all 5 residential areas. They also educated their peers on how hazardous electronic waste can become if it is not disposed of or recycled properly. They promoted recycling behavioral change. The students brought all of the electronic waste to our waste management center where it was sorted and sent to socially responsible companies who could dispose or recycle the materials properly.

A brief description of how the institution is using the campus as a living laboratory for Water and the positive

outcomes associated with the work:

The past two years has seen an emergence in a group of faculty, staff and students involved in researching and promoting the Tan Brook, the watershed that flows through campus and connects the university to neighboring Amherst and flows eventually into the Mill River which flows into the Connecticut River.

Multiple courses have focused on the Tan Brook including Tim Randhir's water management class and David Glassberg's Environmental History class. Graduate students in Landscape Architecture doing thesis on green infrastructure have designed stormwater management solutions for areas of the tan brook to reduce the amount of runoff and erosion caused by the growing impervious surfaces along the watershed in the town of Amherst and on campus.

The first successfully implemented Sustainability Fund Project was proposed by an Eco-Rep student to install low flow sustainable shower heads throughout her residential area.

A brief description of how the institution is using the campus as a living laboratory for Coordination, Planning & Governance and the positive outcomes associated with the work:

The Campus Master Plan (2012), Energy Master Plan (2014), Solar Energy Plan (2014), and Green Building Guidelines are all examples of how the administration uses the campus as a living lab for coordination and planning. Each of these plans have sustainability components and have successfully changed the culture on campus to be extremely supportive of sustainability initiatives.

A brief description of how the institution is using the campus as a living laboratory for Diversity & Affordability and the positive outcomes associated with the work:

Diversity:

The Chancellor's Diversity Advisory Committee, brings together offices, programs and individuals who do important work to advance our campus's commitment to diversity and equity. The committee is comprised of faculty, staff, students, and community members and chaired by Debora Ferreira, Executive Director of Equal Opportunity & Diversity. This Committee serves as an advisory board on matters of diversity, and has been charged with reviewing campus policies and procedures related to diversity; helping to develop new, coordinated initiatives to advance diversity and equity on campus; and contributing to the development of a comprehensive diversity and equity plan.

Affordability:

The Center for Education Policy & Advocacy is a policy and advocacy agency that builds student power and strengthens student voice. CEPA also works on higher education issues at a statewide level, lobbying in support of access to an affordable college education in the state of Massachusetts. CEPA operates as an agency of the Student Government Association and is structured into four core teams: Access and Affordability, Campus Culture, Gender Equity, and Student Labor Action Project. Working both independently and collaboratively, the core teams build partnerships with students, student organizations, faculty, staff, and the administration to institutionalize student voice and shared governance. Our campaigns cover a range of student issues and strive to build a campus environment that is inclusive of and responsive to the diverse needs of students from different cultures and backgrounds, including but not limited to ALANA, LGBTQ, low socio-economic, first generation, international and nontraditional students. We always welcome new members and encourage students to check the core team descriptions below. Together we can continue to work towards a unified and powerful student voice.

Access and Affordability Core Team

Access and Affordability is the statewide advocacy core team of CEPA that works with student groups at other state universities and colleges in Massachusetts as well as across the country (New Jersey, Wisconsin, Oregon, and California to just name a few). This core

team focuses on advocating for increased funding for public higher education and the overall affordability and accessibility of higher education on a statewide level and national level. CEPA's Access and Affordability core team supports the expansion of shared governance within the university, state, and country. They also deal with the issue of student debt-- something that has now surpassed a trillion dollars nationally.

A brief description of how the institution is using the campus as a living laboratory for Health, Wellbeing & Work and the positive outcomes associated with the work:

The Department of Kinesiology at the University of Massachusetts Amherst operates the Body Shop Fitness Center in the Totman building. This fitness center serves as a teaching lab and a gym. The Body Shop provides students a chance to have hands on experience with clients and to interact with the Amherst community. Our goal is for the students to apply their knowledge from classes and previous experiences and share it within the Body Shop community. Additionally, the Body Shop is used to conduct a variety of research projects and used for kinesiology courses as well. The shop also has exercise equipment that generates electricity providing learning opportunities for renewable energy while exercising.

<https://www.umass.edu/sphhs/kinesiology/body-shop>

A brief description of how the institution is using the campus as a living laboratory for Investment and the positive outcomes associated with the work:

Over the past two years, students and faculty have been actively engaged in the advocacy for and campus education of fossil fuel divestment. With an active petition of more than 3,000 student signatures, the core group of Divest UMass Amherst has met with the campus Chancellor, the University President, and the Board of Directors of the UMass Foundation. The group of students successfully pressured the Foundation to create a new Socially Responsible Investing Advisory Committee:

<http://www.umassp.edu/foundation/socially-responsible-investing-advisory-committee>

Students have also organized numerous educational events to raise awareness of the effects the campus's endowment can have on prolonging and increasing climate change. As a core team of the Center for Education, Policy, and Advocacy, students are paid and receive credit for their participation and leadership in this campaign.

A brief description of how the institution is using the campus as a living laboratory for Public Engagement and the positive outcomes associated with the work:

A brief description of how the institution is using the campus as a living laboratory in Other areas and the positive outcomes associated with the work:

The website URL where information about the institution's campus as a living laboratory program or projects is available:

<http://umass.edu/sustainability>

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

Responsible Party

Craig Nicolson

Director of Sustainability Programs
Environmental Conservation

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:

201

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

993

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

36

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

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

[Aashe_Sustainability Faculty by Dept_2015.pdf](#)

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

Aelion, Marjorie | Public Health
 Ahern, Jack | Landscape Architecture and Regional Planning
 Ahlfeld, Dave | Civil & Environmental Engineering
 Allen, Geoffrey | Resource Economics
 Alpert, Peter | Biology
 Anderson, Neal | Electrical and Computer Engineering
 Arcaro, Kathleen | Veterinary and Animal Sciences
 Arwade, Sanjay | Chemical and Mechanical Engineering
 Ash, Michael | Economics
 Auerbach, Scott | Chemistry
 Autio, Wesley | Stockbridge School
 Averill, Anne | Environmental Conservation
 Badgett, Lee | Economics
 Baker, Erin | Mechanical and Industrial Engineering
 Barnes, Michael | Chemistry
 Barstow, Cynthia | Marketing
 Barten, Paul | Environmental Conservation
 Bhatia, Surita | Chemical Engineering
 Bischoff, Annaliese | Landscape Architecture and Regional Planning
 Blanchard, Jeffrey | Biology
 Bloniarz, David | Environmental Conservation
 Boutt, David | Geosciences
 Boyce, Jim | Economics
 Brabec, Elizabeth | Landscape Architecture and Regional Planning
 Bradley, Bethany | Environmental Conservation
 Bradley, Ray | Geosciences
 Brandt, Sylvia | Resource Economics
 Braun, Barry | Kinesiology
 Brause, Caryn | Art, Architecture & Art History
 Brigham-Grette, Julie | Geosciences
 Briseno, Alejandro | Polymer Science and Engineering
 Brown, Casey | Civil & Environmental Engineering
 Burns, Stephen | Geosciences
 Bushouse, Brenda | Political Science
 Butler, Brett | Environmental Conservation
 Calabrese, Edward | Public Health
 Cannon, Maura | Biology
 Carter, Ken | Polymer Science Engineering
 Castaneda, Isla | Geosciences
 Caswell, Julie | Resource Economics
[STARS Reporting Tool](#) | [AASHE](#)

Chilton, Elizabeth | Anthropology
Christofa, Eleni | Civil & Environmental Engineering
Civjan, Scott | Civil & Environmental Engineering
Clark, John | Veterinary and Animal Sciences
Clement, Bill | Geosciences
Clouse, Carey | Landscape Architecture and Regional Planning
Clouston, Peggy | Building and Construction Technology
Condit, Christopher | Geosciences
Condron, Alan | Geosciences
Conner, Curtis | Chemical Engineering
Cooks, Leda | Communications
Cooley, Dan | Microbiology
Coughlin, Bryan | Polymer Science and Engineering
Coughlin, Colleen | Geosciences
Crago, Christine | Resource Economics
Crocker, Kevin | Economics
DaCosta, Michelle | Stockbridge School
Damery, David | Building and Construction Technology
Danylchuk, Andy | Environmental Conservation
Dauenhauer, Paul | Chemical and Mechanical Engineering
DeAngelis, Kristen | Microbiology
Decker, Eric | Food Science
Deconto, Robert | Geosciences
DeGroot, Don | Civil & Environmental Engineering
Emrick, Todd | Polymer Science Engineering
Fan, Wei | Chemical Engineering
Fisette, Paul | Environmental Conservation
Floyd, Steven | Management
Ford, David | Chemical Engineering
Friedman, Lawrence | Polymer Science and Engineering
Fuentes-Bautista, Martha | Communications
Fuller, Todd | Environmental Conservation
Gal, Graham | Accounting
Gano, Gretchen | Center for Public Policy and Administration
Gaubatz, Piper | Geosciences
Geddes, Henry | Communications
Gerber, John | Stockbridge School
Glassberg, David | History
Gordon, Dan | History
Griffin, Curt | Environmental Conservation
Haas, Peter | Political Science
Hamin, Elisabeth | Landscape Architecture and Regional Planning
Hamin, Mark | Landscape Architecture and Regional Planning
Hanson, Jarice | Communications
Hardy, Douglas | Geosciences
Harper, Krista | Anthropology
Hart, Dave | Computer Science
Hashemi, Masoud | Stockbridge School

Hatch, Christine | Geosciences
Hayward, Ryan | Polymer Science Engineering
Hazen, Samuel | Chemical Engineering
Heim, Carol | Economics
Henson, Michael | Chemical and Mechanical Engineering
Herbert, Stephen | Center For Agriculture
Hird, John | Political Science
Holden, James | Microbiology
Hoque, Simi | Building and Construction Technology
Hsu, Shaw Ling | Polymer Science Engineering
Hyers, Robert | Mechanical and Industrial Engineering
Irwin, David | Electrical and Computer Engineering
Jackson, Scott | Environmental Conservation
Keene, Art | Anthropology
Kelty, Matthew | Environmental Conservation
Kittredge, David | Environmental Conservation
Knodler, Mike | Civil & Environmental Engineering
Kotz, David | Economics
Krupczynski, Joseph | Art, Architecture & Art History
Lackner, Matthew | Mechanical and Industrial Engineering
Lahti, Paul | Chemistry
Lass, Daniel | Resource Economics
Lavigne, Ronald | Stockbridge School
Lavoie, Nathalie | Resource Economics
Leatherman, Thomas | Anthropology
Leckie, Mark | Geosciences
Leschine, Susan | Veterinary and Animal Sciences
Letcher, Ben | Environmental Conservation
Lindhult, Mark | Landscape Architecture and Regional Planning
Lopes, John | Microbiology
Lovett, Laura | History
Lovley, Derek | Microbiology
Lugosch, Kathleen | Art, Architecture & Art History
Mabee, Steve | Geosciences
Mahoney, Raymond | Food Science
Mammen, Sheila | Resource Economics
Mangan, Frank | Stockbridge School
Mann, Ray | Art, Architecture & Art History
Manning, William | Microbiology
Manwell, Jim | Mechanical and Industrial Engineering
Maroney, Michael | Chemistry
Maroudas, Dimitrios | Chemical Engineering
McDermott, Katie | Education Policy
McGarigal, Kevin | Environmental Conservation
McGirr, Patricia | Landscape Architecture and Regional Planning
McGowan, Jon | Mechanical and Industrial Engineering
Mednicoff, David | Center for Public Policy and Administration
Metz, Ricardo | Chemistry

Milman, Anita | Environmental Conservation
Modarres-Sadeghi, Yayha | Mechanical and Industrial Engineering
Montenegro-Menezes, Flavia | Landscape Architecture and Regional Planning
Morelli, Toni Lyn | Northeast Climate Science Center
Muthukumar, Murugappan | Polymer Science and Engineering
Nicolson, Craig | Environmental Conservation
Nislow, Keith | Environmental Conservation
Nordvleit, Bjorn | Education Policy
Normanly, Jennifer | Biochemistry and Molecular Biology
Nusslein, Klaus | Microbiology
Oh, Haemoon | Hotel/Tourism Management
Pader, Ellen | Landscape Architecture and Regional Planning
Page, Max | Art, Architecture & Art History
Palmer, Rick | Civil & Environmental Engineering
Park, Chul | Civil & Environmental Engineering
Park, Mi-Hyun | Civil & Environmental Engineering
Parkash, Om | Stockbridge School
Perot, Blair | Mechanical and Industrial Engineering
Petsch, Steven | Geosciences
Picking, Deborah | Environmental Conservation
Pollin, Robert | Economics
Randhir, Tim | Environmental Conservation
Rawlins, Michael | Geosciences
Reckhow, David | Civil & Environmental Engineering
Rees, Paula | Water Resources Research Center
Renski, Henry | Landscape Architecture and Regional Planning
Rich, Steve | Microbiology
Rogers, Christine | Public Health
Roy, Allison | Environmental Conservation
Russell, Thomas | Polymer Science and Engineering
Ryan, Robert | Landscape Architecture and Regional Planning
Salvador, Rommel | Hotel/Tourism Management
Schmalzer, Sigrid | Social Thought and Political Economy Program
Schnell, Danny | Biochemistry and Molecular Biology
Schreiber, Stephen | Art, Architecture & Art History
Schweik, Charlie | Center for Public Policy and Administration
Shenoy, Prashant | Computer Science
Shetty, Kalidas | Food Science
Simkins, Stephen | Stockbridge School
Slegers, Frank | Landscape Architecture and Regional Planning
Sluter, Donald | Geosciences
Soylu, Ceren | Economics
Spraggon, Donna | Resource Economics
Spraggon, John | Resource Economics
Stevens, Stan | Geosciences
Stevens, Tom | Resource Economics
Stranlund, John | Resource Economics
Tessler, Russel | Polymer Science Engineering

Thayumanavan, Thai | Chemistry
Tobiason, John | Civil & Environmental Engineering
Tuominen, Mark | Physics
Venkataraman, Dhandapani | Chemistry
Vicarelli, Marta | Economics
Vogel, Eve | Geosciences
wa Gathinji, Mwangi | Economics
Warren, Paige | Environmental Conservation
Watkins, James | Polymer Science Engineering
Weil, Benjamin | Building and Construction Technology
Whiteley, Andrew | Environmental Conservation
Woodruff, Jon | Geosciences
Wooldridge, William | Management
Yu, Qian | Geosciences
Yuretich, Richard | Geosciences
Zunenga, Ximena | Student Development

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

The research inventory was conducted over a 3-year period. We gathered data on faculty, departments, and research projects that focus on or relate to the topic of sustainability. We reviewed every research proposal submitted to a funding agency to identify faculty and staff engaged in sustainability research. We also reviewed the University's research database to identify sustainability-related projects. The output is a comprehensive inventory of our faculty and staff engaged in sustainability research.

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

Energy Extension Initiative

Funded by a \$6 million grant from the Massachusetts Department of Energy Resources, the UMass Amherst Energy Extension Initiative promotes adoption of renewable energy technology and energy efficiency activities across the state. Approximately \$4 million of this grant supports development of an energy outreach and extension-type program on campus that draws on UMass Amherst experts to help provide assistance and solutions to regional clean energy initiatives.

New England Water Innovation Network

A \$4.1 million grant from the U.S. Environmental Protection Agency (EPA) has funded UMass Amherst research in water treatment innovation, focusing on the development of healthier and more effective alternatives to chlorine for disinfecting in U.S. water treatment facilities. This is also a research and extension-type service that provides faculty expertise to regional and national water treatment problems.

Smart Meter Data Analysis

18,000 smart meters have been deployed in western Massachusetts by computer science faculty and students working in conjunction with a local energy company, providing real time data on consumer electricity usage. This information yields patterns—peak usage times, appliance usage, and more—that are invaluable in making buildings more efficient. The data will feed several sub-projects already underway, including an automated thermostat, that uses building-specific data to make customized usage recommendations and implement such simple yet effective changes as automatically adjusting the thermostat when no one is home.

Northeast Climate Center Grants

UMass Amherst was selected by the U.S. Department of the Interior as host for the Northeast Climate Science Center. Since its inception in 2012, the NECSC has awarded more than \$700,000 in grants to universities and other partners for research to guide managers of parks, refuges and other cultural and natural resources in planning how to help species and ecosystems adapt to climate change. The six studies funded include the impact on wildlife due to changes in snowpack and lake ice in the Great Lakes Basin, information management needs for the floodplain conservation lands of the Mississippi and Missouri rivers, and the development of distribution models for North American breeding birds showing the impact of climate change in order to identify the most vulnerable species and regions.

Sustainable Manufacturing Through Nanotech

A team of scientists have developed a breakthrough technique for controlling molecular assembly of nanoparticles over multiple length scales that should allow faster, cheaper, more ecologically friendly manufacture of organic photovoltaics and other electronic devices. The new techniques successfully address two major goals for device manufacture: controlling molecular assembly and avoiding toxic solvents like chlorobenzene. While being currently used to produce organic photovoltaics and solar cells, this technique has many applications, offering a flexible and ecologically friendly new approach to manufacturing.

The website URL where information about sustainability research is available:

<http://www.umass.edu/researchnext/>

Support for Research

Responsible Party

Karen Hayes

Director, Strategic Communications and Outreach
University Relations

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.
-

Submission Note:

<http://scholarworks.umass.edu/csi/>

"---" 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:

We offer multiple Research Experiences for Undergraduate programs each summer, several of which focus on sustainability research. Examples include the Collaborative Undergraduate Research in Energy (CURE) program

<http://www.chem.umass.edu/masscrest/reu/index.html>

and the Five College Coastal and Marine Sciences program

<http://www.fivecolleges.edu/sites/marine/internships/>

. These are stipend programs.

ICONS. Students in our Interdisciplinary Concentrations in the Sciences (ICoNS) program are offered research mentorships by our tenure system professors. ICoNS has specific tracks for Renewable Energy, Clean Water and Climate Change. The iCoNS (Integrated Concentration in Science) program at UMass Amherst facilitated recent student internships at Waters Corp. in Milford. The students conducted research on controlling microbiological growth in order to insure sustainable water systems.<http://www.cns.umass.edu/icons-program/>

iCoNS Interns at Waters Corporation

Undergraduate Research in Sustainability Award

Papers, theses, design and multimedia projects, and fine art that present research into a sustainability topic are eligible to be nominated for the Undergraduate Research in Sustainability Award. The first prize recipient receives a \$1,000 scholarship and two second place winners receive \$500 scholarships. Applicants must be nominated by a UMass Amherst faculty member.

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

<http://www.umass.edu/ours/>

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:

The UMass Science and Technology Initiatives Fund, the Commercial Ventures and Intellectual Property Technology Development Fund and the Creative Economy Initiatives Fund support UMass Amherst research and activities with high potential for discoveries and breakthroughs in areas important to the Commonwealth, including clean energy.

EXAMPLES

2014 S&T Fund winners Robert DeConto and Raymond Bradley of the geosciences department received \$104,000 for the Center for Computational Climatology and Paleoclimatology, an effort that brings together academic scientists and engineers, industrial researchers and users of high-performance computing resources to the issue of climate change. The grant will help develop a center for climate-related computation and numerical modeling of value to the Commonwealth and contribute to the field of climate science by applying "Big Data" computational analysis, modeling, data mining and visualization to climate change research.

Creative Economy Fund

Flavia Montenegro-Menezes of Landscape Architecture and Regional Planning

was awarded a \$27,000 2013 Creative Economy award for her project, "Participatory Asset Mapping: Sustainable Planning and Development in Holyoke," which is developing a tested and transferable approach to integrating locally unique cultural assets into urban and regional planning.

Commercial Ventures Tech Development Fund

Chemistry professor Dhandapani Venkataraman received a \$25,000 CVIP grant for his study of "Organic Photovoltaic Devices Based on Water-based Nanoparticle Dispersions," a method to fabricate efficient organic photovoltaic devices from aqueous dispersions of polymer nanoparticles. His method greens the process, by replacing aromatic solvents in the current fabrication processes with water. The funding supports fabrication of prototype flexible organic photovoltaic cells from these dispersions.

Endowed Chair in Renewable Energy
[STARS Reporting Tool](#) | [AASHE](#)

\$2.5 million from the state Department of Energy Resources will be used to fund an endowed chair in renewable energy located in the UMass Amherst College of Engineering. The chair will conduct research in renewable energy innovation that will cut energy use, create jobs and protect the environment.

Water Resources Research Center Sponsored Research

The Water Resources Research Center supports faculty research and training of graduate students on water resources issues of state, regional, and national importance. Current sponsored research is focused on topics including best practices for flood mitigation, the uses of biofiltration facilities to process urban storm water runoff and protect water supplies, and refining remediation technologies for landfill leachate contaminants.

<http://wrrc.umass.edu/>

SIEF grants

The UMass Amherst Libraries hosts the Sustainability, Innovation and Engagement Fund (SIEF) which was established in August 2013 to foster a strong culture of sustainability on our campus by incentivizing students, faculty, and staff involvement. Any student faculty, staff, student group, academic class, or faculty/staff and student team can propose a sustainability project.

<http://www.umass.edu/sustainability/get-involved/sustainability-innovation-engagement-fund>

Interdisciplinary Research Centers and Institutes

The campus hosts a number of sustainability-focused research centers and institutes whose main focus is to encourage and support faculty pursuit of sustainability research. The campus's office of Research and Engagement provides numerous ways in which it supports federal, state and private support for research in these centers. Many of these centers and their success stories, are listed on the following websites:

<https://www.umass.edu/researchnext/gateway/environment>

<https://www.umass.edu/researchnext/gateway/energy-and-materials>

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

<http://www.umass.edu/research/internal-funding-opportunities>

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:

Since 2007 the campus has included "cluster hiring" as a regular part of its faculty hiring practices. The purpose of these is to hire faculty positions across academic departments for emerging, interdisciplinary opportunities. Cluster hires were part of the "Amherst 250 Plan" to support strategic faculty hires that will help maintain the campus as a nationally competitive public research university. Additionally, academic units across campus assess interdisciplinary research for tenure and promotion individually.

The campus's current strategic plan, "Innovation and Impact:

Renewing the Promise of the Public Research University" states that "mechanisms to incubate interdisciplinary research should be developed" including "faculty hiring efforts to build interdisciplinary clusters" which will build capacity for research and teaching over time.

<http://www.umass.edu/chancellor/sites/default/files/strategic-planning/Executive-Summary.pdf>

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

<http://www.umass.edu/budget/250/>

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 UMass Amherst Libraries launched the national-award winning Sustainability Fund in 2012. The Fund allows for the acquisition of sustainability-related books, journals, DVDs, and other materials. High-end subscription databases such as GreenR, PolicyMap, BioOne and Sustainability Watch were also added to the collections through use of the Fund. Campus individuals and groups organizing campus programs may request funding for outside speakers. In the past few years, the Fund has helped fund the appearance of prestigious speakers such as Annie Leonard, Majora Carter and Robert Bullard.

The UMass Amherst Libraries maintains several online research guides on topics such as Sustainability, Climate Change, Permaculture, Green Building and Infrastructure, and Food Systems. The Sustainability Studies Librarian offers information instruction to classes as well as by individual consultation. The Sustainability Curriculum Initiative is a mini-grant program that partners librarians and faculty for a one-year experience, including monthly group meetings to discuss the integration of sustainability library resources into the curriculum. These groups are highly interdisciplinary, allowing for cross pollination of ideas across campus. Sustainable UMass makes use of the Library's Institutional Repository (ScholarWorks) to preserve and disseminate campus output related to sustainability.

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

<http://guides.library.umass.edu/sustainability>

Responsible Party

Darci Connor Maresca

Project Manager, Sustainability Programming
ECo

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.

Submission Note:

119 = (56 departments plus school of nursing; 62 research centers and institutes)

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

Total number of institutional divisions (e.g. schools, colleges, departments) that produce research:

119

Number of divisions covered by a policy assuring open access to research:

0

A brief description of the open access policy, including the date adopted and repository(ies) used:

The open access resolution listed below was passed by the University of Massachusetts Amherst Faculty Senate on May 10, 2007. The open access repository is ScholarWorks@UMass Amherst.

MOVED: That the Faculty Senate endorse the recommendations of the Research Library Council 39-07 and encourage faculty, librarians, staff, and administrators to be supportive of new and innovative models of scholarly communication and utilize these options whenever possible.

In addition, the Research Council is starting to work through an Open Access Policy for the university. The goal is to have this voted by the Faculty Senate in Spring 2015.

A copy of the open access policy:

[RLC_resolution_scholarly_publishing_openaccesspolicy.pdf](#)

The open access policy:

Sen. Doc. No. 07-035

RESOLUTION

The Research Library Council recommends that:

WHEREAS the University of Massachusetts Amherst's longstanding commitment to the free and open publication, presentation and discussion of research advances the interests of the scholarly community, the faculty individually, and the public, and

WHEREAS the costs of commercially published scholarly journals are continually rising at rates greater than the rate of inflation and higher than the rate of UMass Amherst budget increases, and

WHEREAS the activities of the publishers of these journals directly depend upon the continued participation of faculty at UMass Amherst and similar institutions acting as editors, reviewers, and authors, and

WHEREAS a lasting solution to this problem requires not only interim measures but also a long range plan, and

WHEREAS publication in open access journals and repositories is an increasingly effective option for scholarly communication,

THEREFORE, BE IT RESOLVED that the University of Massachusetts Amherst Faculty Senate:

1. Encourages faculty to become familiar with the pricing and business practices of journals and journal publishers in their specialty, and to support journals and publishers whose pricing and accessibility policies promote broad and continuing access to scholarship.
2. Urges faculty, especially tenured faculty, to exert a positive influence on the direction of scholarly publishing through the choices they make in the submission of papers, the commitment of time to refereeing activities, and participation in editorial work.
3. Encourages faculty and UMass Amherst to support new models for scholarly publishing, including open access journals and archives, disciplinary and institutional repositories and other approaches that enhance the broad dissemination of knowledge while preserving peer review and excellence in scholarship.
4. Urges faculty to consider carefully the copyright provisions of their contracts with publishers, in order to allow them greater freedom to disseminate their work and thereby maximize the impact of their scholarship.
5. Calls upon the UMass Amherst faculty and administration to consider these issues in the evolution of the promotion and tenure system.

MOVED: That the Faculty Senate endorse the recommendations of the Research Library Council 39-07 and encourage faculty, librarians, staff, and administrators to be supportive of new and innovative models of scholarly communication and utilize these options whenever possible.

The website URL where the open access repository is available:

<http://scholarworks.umass.edu/>

A brief description of how the institution's library(ies) support open access to research:

The University Libraries support many national open access initiatives. For a comprehensive listing, see

<http://www.library.umass.edu/open-access-initiatives-at-umass/>

One of the most recent initiatives that was implemented last summer is the UMass SOAR ("Supporting Open Access Research") Fund which supports open access publication of University of Massachusetts Amherst peer-reviewed scholarship. This fund is supported by the University Libraries

<http://www.library.umass.edu/services/scholarly-communication/soar-fund/>

The website URL where information about open access to the institution's research is available:

<http://scholarworks.umass.edu/>

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

Ezra Small

Sustainability Manager

Physical Plant

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:

Degree seeking students comes from OIR fact sheet:

http://www.umass.edu/oapa/publications/factsheets/enrollment/fall/FS_enr_01_f.pdf

Source and Number Breakdown:

Fall 2013 Enrollment Factsheet

Degree seeking undergrad (including CPE): 21,672

Degree seeking grad (including CPE): 5,848

Degree seeking undergrad plus degree seeking grad: 27,520

Number of students served by the program to whom peer-to-peer sustainability outreach and education is offered (1st program):

Eco-Rep program is now offered to all degree seeking undergrads, living off campus and on campus, so to calculate this I subtracted non-degree seeking undergrads (111) from the total undergrad and Stockbridge headcount (20,728).

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:

27,520

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

Eco-Rep Program

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

20,617

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

The UMass Amherst Eco-Rep Program is focused on working towards environmental literacy both within the program, and on the campus at large. The mission of the Eco-Rep Program is to foster environmental literacy within the campus community and translate that new understanding into more sustainable behavior.

Eco-Reps build a foundational knowledge surrounding issues of sustainability and explore how best to raise awareness about these issues amongst their peers. Focusing on the role and impact of the individual, Eco-Reps work to promote environmentally responsible behavior in the campus community.

Area Eco-Reps from 7 different residential areas on campus educate and facilitate the Eco-Reps within an academic structure each semester by holding weekly seminars and implementing an interdisciplinary curriculum that they develop with the Student Program Manager, the Campus Sustainability Manager and the Faculty Advisor. Every fourth week each unit is completed with an interactive event aimed at educating fellow residents on campus about the issues they have been learning about.

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

The Student Program Manager position is a paid position within Sustainable UMass (formerly the Campus Sustainability Initiative). This position is selected to run the entire program by the the Campus Sustainability Manager. It is their job to facilitate the entire program and educate the Area Eco-Reps. The program Managers who typically serve 2 years in the position are chosen from Area Eco-Reps who show leadership and facilitation skills. Area Eco-Reps educate and facilitate the Eco-Reps with the Direct Support of the Program Manager. Area Eco-Reps are selected through an application process. To apply to be an Area Eco-Rep the student has to have been an Eco-Rep.

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

Area Eco-Reps study the theory and practice of peer facilitation in their first semester in a formal class structure that includes readings and practical experience with the direct support of the Program Managers. These individuals take on progressively more facilitation responsibilities through weekly meetings. At the end of the first semester the Area Eco-Reps are competent student facilitators and are able to work with the Eco-Reps on their own.

Additionally, each Fall semester the group of Area Eco Reps and the Program Manager engage in a launch event that includes facilitation training provided by staff at the UMass UACT office (UMass Alliance for Community Transformation).

The Program Manager is now required (as of Fall 2013) to take the UACT Critical Pedagogy course and all Area-Eco Reps are recommended to take it as well.

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

The Campus Sustainability Manager at UMass Amherst is the anchoring body of the Eco-Rep Program. Through this position the Eco-Rep Program has financial and administrative support via the Sustainable UMass budget which ultimately comes from the Physical Plant budget. The program also benefits from a faculty advisor, Craig Nicolson in Environmental Conservation who helps develop the curriculum and sits in on weekly Area Eco-Rep meetings.

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

UMass Permaculture Initiative

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

27,520

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

The UMass Permaculture Initiative is a unique and cutting-edge sustainability program that converts underused grass lawns on the campus into edible, low-maintenance, and easily replicable gardens. This initiative was created by students and then adopted and funded by our administration in 2010. Students and permaculture staff work together along with UMass Dining Services, Sustainable UMass, and many other departments to demonstrate the vision of what a sustainable community and world can look like.

UMass was the first public university in the country implementing sustainable permaculture gardens directly on campus each year and serving the local, healthy produce in the university's dining commons.

Although the UMass Permaculture Initiative was born from just a few visionary students, we have grown considerably since our inception. As a result of our expansion, the initiative has formed partnerships with three different branches within the UMass Amherst system. The student-led UMass Permaculture committee, the Stockbridge School of Agriculture and, UMass Dining - all working together to achieve the same end.

Staff and students are currently working within the College of Natural Sciences to develop the initiative into a full academic program and major. Currently, the Permaculture Initiative which is facilitated by students, holds workshops and classes within the classroom and in the gardens on and off campus to fellow students and the greater community regarding permaculture techniques, community building, social justice and local food, and grassroots organizing.

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

Sustainability Staff from Dining Services contact departments on campus to recruit students. Students are interviewed for the positions. Preference is given to first people apply and show the most interest. The program actively seeks people from diverse academic backgrounds who have a good sense of community.

A Permaculture Committee of student leaders oversees operations and leadership of the initiative.

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

The first month of student committees existence is split in half between learning the history of the program and the basic agricultural principle. The other half of the work is hands on learning in the garden.

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

A staff supported by the UMass Auxiliary Services includes the Chief Sustainability Specialist who oversees the permaculture garden and all future permaculture garden projects and the Sustainability Specialist who also works with the program and works closely with the student committee. Both these positions are funded through Auxiliary Services at the university as well as the gardens themselves.

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

Sustainable UMass Sustainability Fellowship Program

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

20,617

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

The Sustainable UMass Fellowship Program began in the fall of 2009 with one student intern and has since grown to engage as many as twenty interns in a given semester.

Fellows are compensated with three credits per semester for their commitment to the Sustainability Initiative and are mentored by a faculty sponsor. Some of the Fellows receive pay as well. Students and sponsors collaborate to set academic goals and a midterm and final report of some sort is usually expected.

Each fellow is hired to focus on a specific aspect of sustainability on campus. Categories include Energy & Green Building, Green Office Program, Transportation, Waste and Recycling, Media and Marketing, Community Organizing, and Green Games. Projects are determined on an individual basis to further the implementation of sustainable practices on campus in all of these areas.

In addition to responsibilities to faculty advisors and the planning and implementation of projects, fellows are required to spend a few hours each week in the Sustainable UMass office. This structured time commitment allows for collaboration between fellows and a greater sense of community between all members of the program. In total, participants are expected to spend about nine hours each week on related work.

Fellows will have the chance to attend meetings of the Chancellor's Sustainability Committee which are scheduled monthly.

The Sustainable UMass Fellowship Program aims to continue to make UMass sustainable in all areas of operation while providing an enriching experience for individual program participants. Fellows will walk away with experience, knowledge and a greater passion for sustainable change than they previously possessed.

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

Students apply for Fellowship positions each semester and the UMass Amherst Careers Center advertises all open positions each semester. Students are asked to submit a resume and cover letter and then are interviewed based on their qualifications and the need within the organization by the Campus Sustainability Manager and the Student Sustainability Coordinator.

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

The new student educators go through a brief training before the semester begins. During the semester the students have access to veteran student educators as well as UMass staff and faculty.

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

Sustainable UMass has a budget provided by the Physical Plant. The director of the Physical Plant works closely with the students to ensure the development and execution of sustainable programs.

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

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

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

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

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

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

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

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

Student Orientation

Responsible Party

Ezra Small

Sustainability Manager

Physical Plant

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.

"---" 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:

Sustainable UMass (Eco-Rep Program, Fellowship Program, Permaculture Initiative) is present at all New Students Orientations (NSO) and Open Houses in the spring, summer, and fall. It holds information sessions for the new students to talk to them about sustainability and how they can get involved here on campus.

In Fall 2013, NSO was completely sustainability themed and partnered with Sustainable UMass to hold sustainability discussions around the common read which was selected as "No Impact Man."

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

<http://www.umass.edu/newstudent/fall/commonreading/>

Responsible Party

Ezra Small
Sustainability Manager
Physical Plant

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	---
Wilderness or outdoors programs that follow Leave No Trace principles	Yes
Sustainability-related themes chosen for themed semesters, years, or first-year experiences	Yes
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	---

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

The Sustainable UMass Action Coalition (SUMAC) is a new student group on campus that is invested in precipitating interest within the community about issues of environmental sustainability. SUMAC is the student voice for sustainability on campus, providing information and a forum for discussion of sustainable initiatives. This group is dedicated to the research, education, and support essential to resolving issues of environmental sustainability on the UMass campus and in the surrounding communities. We hope to play an active role in making UMass a leader in sustainability.

The website URL where information about student groups is available:

<https://www.umass.edu/sustainability/get-involved/student-groups>

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 UMass Permaculture Initiative is a unique and cutting-edge sustainability program that converts underused grass lawns on the campus into edible, low-maintenance, and easily replicable gardens. This initiative was created by students and then adopted and funded by our administration in 2010. Students and permaculture staff work together along with UMass Dining Services, the Campus Sustainability Initiative, and many other departments to demonstrate the vision of what a sustainable community and world can look like.

There are now four Permaculture Gardens on campus:

1. Franklin Permaculture Garden

Location: Franklin Dining Commons

Groundbreaking: Fall semester 2010

The Story: The UMass Permaculture Initiative, with help from student and local volunteers, embarked on the arduous mission to transform the otherwise unproductive grass lot adjacent to Franklin Dining Commons on campus into a highly productive, aesthetically pleasing, educational, sustainable garden.

2. Worcester Herb Garden

Location: Worcester Dining Commons

Groundbreaking: Summer 2011

The Story: Chef Don Sabola started the Worcester Herb Garden in 2009 to have a fresh source for herbs right outside the Worcester Dining Commons. In 2011 after our first sheet mulch of the Franklin Permaculture Garden, the Worcester Herb Garden was given to us to transform and maintain. For this garden, the UMass Permaculture Initiative worked with UMass Dining staff to develop a dynamic herb garden adjacent to the Worcester Dining Commons. The site was designed with chefs' needs in mind, is easy to harvest by dining staff, is aesthetically pleasing, and improves ecological diversity.

3. Class of 2012 Berkshire Permaculture Garden

Location: Berkshire Dining Commons

Groundbreaking: Fall 2011

The Story: The Class of 2012 Berkshire Permaculture Garden is our newest on-campus garden, generously funded by the Class of 2012

Senior Class Gift Fund. Before we did any work on the site, we observed signs of compaction, erosion, and nutrient depletion in the soils. We're now in the process of converting this formally-neglected site into an ecological haven with rich, fertile soil and lots of biodiversity.

4. Chancellor's House Garden

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

<http://www.umassdining.com/sustainability/permaculture/our-gardens>

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

For over 35 years, the People's Market has been a student-run collective that provides the UMass Amherst campus with conscientiously purchased, natural foods. Students who work for the People's Market gain sustainable business skills. They have a strong commitment to providing customers with food products from socially and environmentally responsible companies.

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

<http://www.umass.edu/rso/peoples/>

A brief description of the sustainable investment or finance initiatives:

UMass Amherst established a Sustainability Innovation & Engagement Fund in August 2013. The fund started at \$50,000 in available funds to allocate for the best sustainability engagement proposals on campus and is open to any campus community member. The proposals are vetted by the Student Steering Committee which includes student leaders from sustainability related registered student organizations (RSO's), Sustainable UMass, and Student Government Association.

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

<https://www.umass.edu/sustainability/get-involved/sustainability-innovation-engagement-fund>

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

Yes, UMass holds major events with a focus in sustainability multiple times a year in the fall and spring. Each year UMass holds campus wide Earth Day events in the spring and Campus Sustainability Day events in the fall.

Other events includes seminar series such as "Designing for sustainability in the Built Environment." The seminar series discussed the difficulties and solutions when constructing energy efficient classrooms and laboratories at a public institution. The seminar series kicked off a campus-wide dialogue about these exciting and far-reaching projects. Each panel discussion featured facilities planning/design professionals and a University of Massachusetts Amherst academic researcher.

We also co-sponsored a lecture series in Spring 2011 that included Naomi Oreskes (Climate Change), Kert Davies (Gulf Oil Spill), Jerry Melillo (Global Land Use patterns) and Nat Tripp (Connecticut River).

Sustainable UMass, the Earth Day Committee, the Permaculture Initiative, and Student Affairs have recently brought (or are planning to bring) the following speakers to campus over the past two years:

Past:

Charles Mann (March 2012)

Robert F. Kennedy Jr. (Earth Day 2012)

Francis Moore-Lappe (June 2012)

Van Jones (October 2012)

Bill McKibben (April 2013) *cancelled due to Boston Marathon Bombings

Annie Leonard (Earth Day 2013)

Majora Carter (June 2013)

Colin Beavan (September and October 2013)

Scheduled:

Dr. Robert Bullard (Earth Day 2014)

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

<https://www.umass.edu/sustainability/news-events/upcoming-events>

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

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

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

Since 1922 the UMass Outing Club has been organizing events for students by students. Events range from hiking, climbing, canoeing, kyaking, skiing, and caving.

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

<http://www.umass.edu/rso/outingclub/>

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

For academic year 2013-2014, all incoming new students were asked to read the book, No Impact Man, and the author, Colin Beavan, addressed all students at the First-year Student Fall Convocation as well as revisited campus during the semester in October.

The website URL where information about the theme is available:

<http://www.umass.edu/newstudent/fall/commonreading/>

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

In August of 2013, Sustainable UMass, Residential Life, and Admissions partnered to establish the model green room in Knowlton 112 in the Northeast Residence Area. This room is also the model room that is used for all campus tours so thousands of families and potential [STARS Reporting Tool](#) | [AASHE](#)

students see this room each year. This project was originally proposed by a student in a Resource Economics class who wanted to help the University achieve a higher STARS score and build awareness amongst the student body for how to live greener on campus. The proposal was approved by the Residential Life Director in May of 2013 and opened in August.

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

http://www.housing.umass.edu/living/your_sustainable_room.html

A brief description of sustainability-focused student employment opportunities:

Student employee opportunities range from the Physical Plant Sustainable UMass office including Minute Riders compost program positions, to UMass Dining Sustainability office working with Permaculture, Real Food Challenge, and local food procurement.

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

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:

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

Outreach Materials and Publications

Responsible Party

Ezra Small
Sustainability Manager
Physical Plant

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	No
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	No
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	Yes
Other sustainability publications or outreach materials not covered above	Yes

A brief description of the central sustainability website:

Re branded and launched in October 2013, Sustainable UMass website features ways for the campus community and beyond to "Learn It, Live It, and Lead It!"

The website URL for the central sustainability website:

<https://www.umass.edu/sustainability/>

A brief description of the sustainability newsletter:

The Sustainability Newsletter is published several times a year and is sent to a growing list of faculty, staff, students, and alumni.

The website URL for the sustainability newsletter:

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

The UMass Amherst Sustainability Facebook page is designed to keep the student body up to date and aware of the many exciting things happening on campus in relation to sustainability and how they can get involved. And also to give students a place to voice their questions, concerns or comments about sustainability issues or projects on campus.

The Sustainable UMass team (contributors to the social media platform) consists of a collaborative group of students, staff, and faculty promoting sustainable changes in campus operations & behavior.

Mission: To explore and communicate ways to improve upon current university practices by fostering innovative ideas and technologies developed both within the campus community and beyond, to educate the campus community to create a healthier and more responsible environment and to develop progressive solutions to reduce negative environment impacts in ways that are economically beneficial.

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

<https://www.facebook.com/UMassSustainability>

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

The campus-wide Research Next website is the go-to online gateway for highlighting student and faculty research through the energy and environment gateways.

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

<http://www.umass.edu/researchnext/gateway/energy-and-materials>

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

Although the campus does not purchase LEED plaques for building entrances, any new construction is required to build to LEED Silver minimum standards and have dashboards in lobbies which highlight sustainable features of the building. There are 60 Certified Green Offices across campuses and each one has a plaque indicating its participation and level of certification at the front desk of each office.

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

<http://www.umass.edu/sustainability/green-campus/buildings>

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

Auxiliary Services, which oversees all campus dining halls and restaurants produces signage and brochures about sustainable food systems, composting, purchasing, and other initiatives. Signage and brochures can be found in the dining halls, restaurants, and at the Franklin Permaculture Gardens, as well as on line.

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

<http://www.umassdining.com/sustainability>

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

N/A

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

A brief description of the sustainability walking map or tour:

The student tour guides who provide tours for all campus visitors highlight sustainability efforts and buildings as part of the tour.

The Sustainable UMass Sustainability Explorer Interactive Map tool is available to the public and is constantly updated by Campus Planning and the Green Building Researcher student team.

The website URL of the sustainability walking map or tour:

<http://maps.umass.edu/apps/sustainability/cse/>

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

UMass Amherst Parking Services Commuter Options Program website informs students, faculty, and employees about various transportation methods. It is a website that has links and information about various transportation options, including:

NuRide (Rewards Program)

Car Sharing (WeCar and ZipCar)

Carpooling

Occasional Parking Permit

Ridematching

Clean Vehicle Permit

UMass Transit

Bicycle Commuter Program

Vanpool

Park and Ride

MassRides Emergency Ride Home

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

<http://parking.umass.edu/index.php/generalinfo/commuteroptionsprogram/>

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

N/A

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

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

Residential Life and Admissions Office in collaboration with Sustainable UMass created a Model Green Residence Hall room and website in summer 2013. Every prospective student and parent visits this room on campus tours.

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

<http://www.umass.edu/sustainability/green-campus/model-green-residence-hall-room>

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 Daily Collegian regularly cover sustainability events and stories on campus and in the region.

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:

<http://dailycollegian.com/>

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

The college of Natural Science regularly publishes sustainability stories and information on their website and in their newsletter.

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

<http://www.cns.umass.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 UMass Office of News & Media Relations also regularly reports on sustainability initiatives and achievements

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

[STARS Reporting Tool | AASHE](#)

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

No

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

n/a

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

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

No

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

n/a

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

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

No

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

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

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

No

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

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

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

No

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

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

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

No

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

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

Outreach Campaign

Responsible Party

Ezra Small

Sustainability Manager

Physical Plant

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:

Campaigns:

<https://www.umass.edu/sustainability/>

<http://www.umassdining.com/sustainability/permaculture>

<https://www.isenberg.umass.edu/netimpact/>

<http://www.umass.edu/rso/masspirg/>

<http://divestumass.org/>

<http://www.umass.edu/sustainability/green-campus/real-food-challenge>

<https://www.facebook.com/UMassGreenBuildingCouncil>

"---" 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):

Sustainable UMass, Eco-Rep Program, NetImpact, MASSPIRG, UMass Fossil Fuel Divestment Campaign, Permaculture Initiative, Real Food Challenge, USGBC Student Chapter (UMGBC)

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

There are numerous extra-curricular based campaigns on campus from Registered Student Organizations like MASSPIRG (Ban the Bottle), to SUMAC/Sustainable UMass Action Coalition (Anti-Fracking Campaigns) to the UMass Fossil Fuel Divestment Campaign, to curricular and co-curricular based campaigns such as the Eco Rep Program, Fellowship Program, Sustainability Student Steering Committee, the Permaculture Initiative, and the Real Food Challenge.

One of the major aspects of the Eco-Rep Program is teaching the students in the program to develop and run their own campaigns on issues surrounding sustainability. Over the past 4 semesters the program has involved over 400 students and has reached out consistently to the undergraduate class. Many Eco-Reps go on to serve in other sustainable related campaigns that are listed above.

Sustainable UMass has done many outreach campaigns, one of the most prominent examples is the sustainable move-out campaign which will be expanding in 2014 to include a campus wide Reuse Tag Sale in the fall.

UMass Fossil Fuel Divestment Campaign has recently been successful in having a divestment campaign supported and signed by the Student Government Association President as well as the Vice Chancellor of Student Affairs, and most recently convinced the UMass System Foundation to establish a Committee on Socially Responsible Investing.

The Real Food Challenge has developed into a 20-30 student co-curricular internship program that gives students the opportunity to not only run the RFC calculator for Auxiliary Services food audit but to learn in a collaborative setting about building more local and regional food system options for UMass and its food suppliers.

In 2013 the Student Steering Committee reformed under the leadership of the Campus Sustainability Manager with a new task to help implement the new Sustainability Innovation and Engagement Fund by reviewing and ranking each proposal as well proposing their own ideas to the fund.

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

Earth Day and Campus Sustainability Day celebrations each year: Van Jones (2012), Robert F Kennedy Jr. (2012), Annie Leonard (2013), Dr. Robert Bullard (2014)

UMass Fossil Fuel Divestment Campaign: Foundation created a Committee on Socially Responsible Investments (2014)

The Common Read for the 5,000 incoming freshman for the class of 2017 was "No Impact Man" and hosted author Colin Beavan for the First Year Student Convocation in the Fall of 2013 and again as a guest on campus in October.

Permaculture Committee: There are now four Permaculture Gardens on campus and a very active local food network of students who are impacting the movement on a regional scale.

Real Food Challenge: The Chancellor has signed the Real Food Challenge, making UMass the largest campus dining program in the country to sign on.

Student Massachusetts Chapter of the USGBC: Helped distribute over 5,00 LED light bulbs to campus residents.

Eco-Rep Program and Fellowship Program: Electricity consumption and waste has decreased total and per student over the last 3 years despite a growing occupancy rate each semester and less access to fellow residents due to safety measures in the residence halls. Waste diversion ranks in the top 3 percent compared to other state communities. The Sustainable Move Out diverted 110 tons of waste from being disposed of improperly. The 2014 EPA Gameday Challenge yielded over 2,000 lbs of recycling diverted from landfill at November 12 football game with over 75 volunteers collecting and weighing recycling at the tailgate.

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

<https://www.umass.edu/sustainability/>

The name of the campaign (2nd campaign):

UMass Green Office Program

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

The Green Office Program now has 60 offices participating as certified green offices and have active employees in each office serving as Eco-Leaders who are responsible for implementing sustainability measures in energy efficiency, waste reduction, kitchen sustainability, and green purchasing.

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

Over 60 offices are participating and an unknown amount of virgin paper is being reduced in these offices, energy is being saved minimally, greener cleaning products and more reusable products in kitchens are providing a more sustainable and healthy work space.

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

<http://www.umass.edu/sustainability/get-involved/green-office>

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

Employee Educators Program

Responsible Party

Ezra Small
Sustainability Manager
Physical Plant

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*.

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

Does the institution administer or oversee an ongoing faculty/staff peer-to-peer sustainability outreach and education program that meets the criteria for this credit?:

Yes

Total number of employees:

5,200

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

Green Office Program

Number of employees served by the program (1st program):

2,170

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

Each participating office in the Green Office Program has one or two Eco-Leader volunteer employees in that respective office. Those Eco-Leaders are tasked with working with their entire department from the director/dean down to each employee to reach a "green" certification for their office. In some instances, Eco-Leaders are asked to volunteer for their office but usually these Eco-Leaders

volunteer themselves out of interest.

Each Eco-Leader does peer-to-peer education within their office and attends the Eco-Leader forum which takes place each summer to share best practices with fellow employees. In some cases, like the Library, our Eco-Leaders meet with each other on a monthly basis in the Library.

Other educators include Sustainability Manager who oversees the Green Office Program.

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

Eco-Leaders are trained to follow the Green Office Program checklist for their office by participating in checklist walk-through's and meetings with our trained Student Sustainability Fellows.

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

The Green Office Program is a program of Sustainable UMass which is supported by multiple departments. The Green Office Program lives fiscally within the Physical Plant budget.

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

<https://www.umass.edu/sustainability/get-involved/green-office>

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

LEED Green Building Education

Number of employees served by the program (2nd program):

400

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

There are multiple green building education programs open to all faculty and staff at UMass Amherst. These include LEED study groups, webinars, and green building symposiums.

Study Groups:

A capital projects manager partners with a faculty member in the Master in Environmental Science to train students and area professionals in becoming LEED Accredited; the course offers 3 credits upon successful completion of the test and utilizes a team base learning classroom to facilitate discussion among students and professionals. Students who have passed the examination are then trained to lead study groups organized by the UMass Green Building Council, a resident student organization, and participate in leading green building tours and supporting campus LEED projects. Sustainability education initiatives are also supported by the Green Building Committee and Master Plan Sustainability Committee in the form of public lectures and continuing education offerings (AIA and GBCI credited programs) that are open to the public and cover topics such as energy modeling, green building, sustainable communities and green infrastructure. Specific employee education programs are offer on the LEED rating systems and practical ways for managing green projects.

Webinars:

The campus has partnered with the USGBC MA Chapter in delivering pre-recorded LEED Webinars to campus staff and faculty for free.

This series also provides Continuing Education credits for registered architects and LEED APs for a nominal fee of \$10/seminar. The educators are LEED Faculty from the USGBC and the webinars are of highest professional quality

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

The Employee Educators facilitate conversations between students, staff and interested local professionals on the LEED rating system requirements and support study and practice for testing for the credential. Study materials are provided by the USGBC and GBCI; and the UMass Sustainability Guidelines are used as a tool for understanding our campus and how it benefits from the LEED Programs.

A senior campus and facility planner devotes part of her time to providing instruction and facilitating discussions on sustainability practices and LEED that are open to all faculty, students, professional and administrative staff. Study Groups that train participants for the LEED Green Associate and LEED AP BD+C exams take place in the fall and spring. This fall there will be an independent study course offered on Green Building strategies and practices. In addition, campus employees in Facilities & Physical Plant will be trained on the LEED rating system for Building Design & Construction, as well as for Operations & Maintenance. This program will also be open to the public.

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

The Physical Plant hires interns to work on the program along with the Sustainability Manager. The interns are paid interns who help develop and support the program. UMass provides meeting space on a weekly basis for committees and educational lectures/ Webinars, as well as free conference space for events.

All of the programs are free to the general public. CEU's are free to MA Chapter Members and UMass Staff through an arrangement with the MA Chapter. All events are advertised on the UMass Calendar of Events.

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

<http://www.usgbcma.org/node/496>

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

Number of employees served by all other programs:

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

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

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

The website URL where information about the program(s) is available (all other programs):

Employee Orientation

Responsible Party

Ezra Small

Sustainability Manager

Physical Plant

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).

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

The percentage of new employees that are offered orientation and/or outreach and guidance materials that cover sustainability topics:

100

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

Our HR department conducts weekly orientation sessions for all new benefited employees (staff, faculty, and graduate students). During this orientation they cover a selected set of University and Campus policies: these include the campus's sustainability goals, and materials summarizing these goals are given to each new employee.

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

Staff Professional Development

Responsible Party

Ezra Small
Sustainability Manager
Physical Plant

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
-

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

Does the institution make available training and/or other professional development opportunities in sustainability to all staff at least once per year?:

Yes

A brief description of the sustainability trainings and professional development opportunities available to staff :

UMass Amherst hosts the US Green Building Council Chapter for Western Massachusetts. Regular webinars are offered that are open to all UMass staff and faculty.

The percentage of staff that participated in training and/or other professional development opportunities in sustainability during the previous year:

The website URL where information about staff training opportunities in sustainability is available:

<http://www.usgbcma.org/>

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

Responsible Party

Ezra Small
 Sustainability Manager
 Physical Plant

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
<p>A. Supportive</p>	<ul style="list-style-type: none"> • <i>Scope:</i> Addresses a sustainability topic or a specific aspect of sustainability (e.g. community garden, environmental remediation, community environmental health and education) • <i>Duration:</i> May be time-limited (short-term projects and events), multi-year, or ongoing • <i>Commitment:</i> Institutional involvement may include financial and/or staff support or may be limited to resource sharing and/or endorsement • <i>Governance:</i> Campus and community leaders or representatives are engaged in program/project development
<p>B. Collaborative</p>	<ul style="list-style-type: none"> • <i>Scope:</i> 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) • <i>Duration:</i> May be time-limited, multi-year, or ongoing • <i>Commitment:</i> Institution provides faculty/staff, financial, and/or material support • <i>Governance:</i> 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*.

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

Does the institution have at least one formal sustainability partnership with the local community that meets the criteria as “supportive”?:

Yes

A brief description of the institution’s supportive sustainability partnership(s) with the local community:

The Leading by Example Program (LBE) was established in April 2007 by Governor Deval Patrick’s Executive Order No. 484, "Leading by Example - Clean Energy and Efficient Buildings". The program is overseen by the Executive Office of Energy and Environmental Affairs (EEA) and the Executive Office for Administration and Finance (A&F). Within these two offices, various divisions and departments manage specific aspects of the program, including the Department of Energy Resources, Department of Environmental Protection, Division of Capital Asset Management, and the Operational Services Division.

The LBE Program encompasses all of Massachusetts’ executive agencies and public institutions of higher education. These agencies and institutions own 70 million square feet of buildings and 8,000 vehicles, employ over 65,000 people, and include 29 college campuses. Through various initiatives, LBE works to reduce the overall environmental impacts of state government operations, particularly climate and energy impacts. Executive Order 484 establishes higher energy efficiency standards in the operation of state buildings, setting short- and long-term targets and goals to advance clean energy and efficiency, and reduce greenhouse gas emissions that contribute to global warming. In addition, the LBE Program promotes sustainability activities within state government including waste reduction, water conservation, green buildings, alternative fuels, efficient transportation, and recycling.

Special Note relating to student engagement with local community: Sage Sluter, a graduate student in landscape architecture and regional planning, has submitted a proposal to create an eco-industrial park at a former factory site in Greenfield. Her 67-page plan, which calls

for rain gardens, small buildings with solar panels and open space, drew praise from Greenfield Mayor William Martin.

Does the institution have at least one formal sustainability partnership with the local community that meets the criteria as “collaborative”?:

Yes

A brief description of the institution's collaborative sustainability partnership(s):

UMass is involved in organizing and hosting the Western MA Branch of the US Green Building Council's (USGBC) Massachusetts Chapter and forging relationships between the university's Green Building Sub-Committee (GBC) of the Chancellors Sustainability Committee, the USGBC MA Chapter, Western MA AIA, North East Sustainable Energy Association (NESEA), and Western MA Green Consortium. Green Building practitioners from across the Pioneer Valley use UMass Amherst as a meeting place and resource for addressing green building and sustainable development on campus and in the surrounding areas. UMass staff in Campus Planning, Design & Construction Management as well as many faculty in Landscape Design & Regional Planning, Green Building, Architecture, and Environmental Conservation all serve on these committees alongside community members.

Link:

<http://www.umass.edu/sustainability/get-involved/usgbc-ma>

Does the institution have at least one formal sustainability partnership with the local community that meets the criteria as “transformative”?:

Yes

A brief description of the institution's transformative sustainability partnership(s) with the local community:

UMass Amherst is also involved with the Pioneer Valley Planning Association (PVPC). Together they have created a dialogue for sustainable change in the area, and the Campus Sustainability Manager serves on multiple PVPC committees working to advance specific initiatives to transform the Pioneer Valley into a more climate resilient and sustainable region, including the Clean Energy Working Group, and more currently, the Regional Bike Share Committee, which just finished the first ever feasibility study for a regional bike share program in the Pioneer Valley.

Link:

<http://www.pvpc.org/regionalbikeshare>

A brief description of the institution’s sustainability partnerships with distant (i.e. non-local) communities:

The website URL where information about sustainability partnerships is available:

[STARS Reporting Tool | AASHE](#)

<http://www.mass.gov/eea/grants-and-tech-assistance/guidance-technical-assistance/leading-by-example/>

Inter-Campus Collaboration

Responsible Party

Ezra Small
Sustainability Manager
Physical Plant

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:

UMass Amherst will be hosting the northeast regional campus sustainability conference in April, 2015: "Strengthening Ties for Collective Impact: Campus Sustainability in the Northeast Region" and is in collaboration with the NESCS and NECSF.

<http://www.umass.edu/sustainability/northeast>

"---" 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:

Locally, in spring 2009, the Five College Inc. published an article about the sustainable approaches that are being used at the institutions. This link details the efforts around about cogeneration power plants, green buildings, transportation, sustainable dining, and other exciting initiatives:

http://www.fivecolleges.edu/sites/sustain/documents/5college_ink_2009-2010_sustainability_artic

[le.pdf](#)

The Five Colleges Blue Sky Initiative, launched In December 2011, encourage suggestions, ideas, or fully developed proposals for new and improved sustainability initiatives. Over 500 proposals were received, and 18 projects were selected as semifinalists and a committee proposed four top proposals to the Five College Board of Directors in 2012. Many of the proposed initiatives are underway on each respective Five College campus.

Final Blue Sky Initiative Document:

https://www.fivecolleges.edu/system/files/null/Final_output_report2_0.pdf

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:

AASHE, Second Nature, USGBC, Post-Landfill Action Network, Northeast Campus Sustainability Consortium

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

A variety of Five College sustainability studies programs and services offer opportunities and support for students who want to study the impact of humans on the environment. Current initiatives include a Five College lecture series, a website listing available courses and programs, a Five College certificate in sustainability studies and affiliated faculty members, and a food and agriculture summer institute, at Hampshire Farm.

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

<https://www.fivecolleges.edu/sustain/sandbox>

Continuing Education

Responsible Party

Ezra Small

Sustainability Manager

Physical Plant

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.

Submission Note:

Course count of 72 come from the following course listings located here:

Sustainability Studies:

<http://www.umass.edu/uww/sites/default/files/PDFs/UMassAmherst-online-course-sample-Sustainability.pdf>

(48)

Sustainable Food and Farming:

<http://www.umasslearn.net/programs/green-programs/sustainable-food-farming>

(11)

Design and Historic Preservation:

<http://www.umasslearn.net/programs/green-programs/master-science-design-historic-preservation>

(7)

Sustainable Design/Build:

<http://www.umasslearn.net/programs/green-programs/yestermorrow-design-build-school>

(4)

Plant and Soil Science Certificate Program:

<http://www.umasslearn.net/programs/certificate/soil-science>

(2)

Please note, we also have certificates in:

Conservation/National Park Service Law Enforcement:

<https://anpr.org/documents/FlyerUMASS.pdf>

Turf Management (International Winter School for Turf Managers):

<http://www.umasslearn.net/programs/certificate/international-winter-school-turf-managers>

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

Does the institution offer continuing education courses that address sustainability?:

Yes

Number of continuing education courses offered that address sustainability:

72

Total number of continuing education courses offered:

718

A copy of the list and brief descriptions of the continuing education courses that address sustainability:

A list and brief descriptions of the continuing education courses that address sustainability:

Description here

Does the institution have at least one sustainability-themed certificate program through its continuing education or extension department?:

Yes

A brief description of the certificate program:

Sustainable Food and Farming Certificate Program

In this 16-credit, 5 course certificate program you will learn about sustainable farming methods and the education and policy changes needed to effect a global move to sustainable farming methods. The certificate will help prepare students in three areas of study:

Sustainable Farming Systems - this includes sustainable and organic plant and animal production systems for managing regionally focused (local) farms, organic farms, Community Supported Agriculture (CSA) farms, and personal homesteads.

Education - this includes youth education, citizen education, non-profit educational organizations, media work, and formal teaching relating to ecological food and farming.

Public Policy and Advocacy - this includes working directly with people and groups in coalitions such as community gardens, anti-hunger campaigns, and environmental protection groups, as well as non-profit advocacy organizations, government agencies, and personal citizen involvement in political and community change efforts.

Credits earned may be applied to the University Without Walls Sustainability Studies degree completion program, the UMass Amherst Bachelor of Science Degree in Sustainable Food and Farming.

Certificate program classes are open to all students with a GED or high school diploma.

Year the certificate program was created:

2,010

The website URL where information about sustainability in continuing education courses is available :

<http://www.umasslearn.net/programs/green-programs>

Responsible Party

Ezra Small
Sustainability Manager
Physical Plant

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.

Submission Note:

The numbers in this report for this credit come from a recent "Community Impact Report" called "UMass Amherst: Making a Difference" (

<http://www.umass.edu/universityrelations/sites/universityrelations/files/pdf/community-impact-report.pdf>

) which sites that "It is estimated that 9,200 students engage in some kind of community service each year, performing nearly 23,000 hours of service."

NOTE re: Employee community service:

The campus's Civic Engagement and Service Learning Office works with more than a hundred faculty members to partner with over 50 local community organizations and public schools, integrating classroom and community experience to enhance learning and meet community identified needs. Faculty and staff also volunteer their time and specialized skills with organizations throughout the region.

In 2011–12, employees and retirees raised \$434,000 through the UMass Amherst Community Campaign, with 56 percent of that going to charities and organizations in the Pioneer Valley.

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

Number of students engaged in community service:

9,200

Total number of students :

21,299

Does the institution wish to pursue Part 2 of this credit (community service hours)?:

Yes

Total number of student community service hours contributed during a one-year period:

23,000

Does the institution include community service achievements on student transcripts?:

A brief description of the practice of including community service on transcripts, if applicable:

Does the institution provide incentives for employees to participate in community service (on- or off-campus)?:

A brief description of the institution's employee community service initiatives:

The website URL where information about the institution's community service initiatives is available:

<http://www.umass.edu/community>

Community Stakeholder Engagement

Responsible Party

Ezra Small
Sustainability Manager
Physical Plant

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*.

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

Has the institution adopted a framework for community stakeholder engagement in governance, strategy and operations?:

Yes

A brief description of the policies and procedures that ensure community stakeholder engagement is applied systematically and regularly across the institution's activities:

STRATEGY: Chancellor Subbaswamy's Strategic Plan: In October of 2012, a Joint Task Force on Strategic Oversight (JTFSO) was charged to "make recommendations to the Chancellor with respect to a high-level Strategic Plan" to be submitted to the New England Association of Schools and Colleges (NEASC) as part of the campus's fifth-year interim accreditation report in August 2013. JTFSO is a group of 31 faculty, staff, and students appointed by the Chancellor and the Faculty Senate to lead the planning effort. That group, together with numerous committees and subcommittees, produced a draft of a first phase document that was put before the campus for review and comment during the spring semester of 2013. In all, more than 130 members of the community contributed to this document. JTFSO members presented the draft to more than two dozen administrative and governance groups, and convened four campus-wide open forums. On May 9, 2013, the document was presented to the Faculty Senate, which voted unanimously to "specifically support the

report's broad goals of establishing UMASS/Amherst as a "destination of choice for the next generation of the Commonwealth's high school graduates" and as an "investment of choice in the Commonwealth's and nation's future" and to "recognize and applaud the fact that this was the first strategic planning process in the institution's history that was genuinely collaborative among faculty, students and administration."

Link:

<https://www.umass.edu/provost/strategic-planning>

OPERATIONS: The Campus Master Plan: With the campus in the midst of a \$1 billion capital improvement program, the University of Massachusetts Amherst has adopted a new physical master plan that looks 50 years into the future. The plan matches academic vision with facilities to strengthen a sense of community and enhance the campus's beauty. "This plan establishes a shared vision for future development," said Director of Campus Planning Dennis Swinford. "The administration held more than 90 events in the past year with key stakeholders, including students, faculty, staff, our host communities and regional representatives and that was complemented by web-based surveys and applications to encourage participation."

Link:

<http://www.umass.edu/cp/mp.htm>

A brief description of how the institution identifies and engages community stakeholders, including any vulnerable or underrepresented groups:

The Provost and Chancellor's office solicited comments for the first phase of the strategic planning process mentioned above. The Chancellor wrote a personal letter to the campus community inviting the entire community to engage in the process and provide feedback on the first report:

<https://www.umass.edu/provost/sites/default/files/uploads/Chancellor%27s%20Message.pdf>

For the Master Plan, the Campus Planning department held more than 90 events in 2011-2012 with key stakeholders, including students, faculty, staff, our host communities and regional representatives and that was complemented by web-based surveys and applications to encourage participation, and it continues to hold quarterly master plan updates at community forums held on campus.

"The University of Massachusetts aims to institutionalize a climate of inclusivity that promotes a robust exchange of ideas, cross-racial and cross-cultural interaction and engagement, and the opportunity for all to participate. We do this through multiple initiatives and programs that promote inclusive excellence, including those focused on race, gender, sexual orientation, gender identity, ability, age, national origin, and ethnicity, and also those based on hobbies, interests, geographical locations, personal style, and life experiences. I work with Chancellor Kumble Subbaswamy to implement the historical, "radical vision" of UMass that "any deserving citizen of Massachusetts, regardless of wealth or social status, should have access to higher education." Despite the enormity and complexity of this vision in these challenging times, it is at the root of everything we do: Excellence in research, teaching, and service requires inclusiveness, and inclusion begets excellence. Go UMass!" - From Dr. Amilcar Shabazz, Diversity & Excellence Advisor to the Chancellor and Faculty Senate

List of identified community stakeholders:

Examples of community stakeholders:

Members of the Campus and Community Coalition (CCC,

<http://www.umass.edu/community>

):

Amherst beverage retailers
Amherst Area Chamber of Commerce
Amherst Fire Department
Amherst Health Department
Amherst Police Department
Amherst Select Board
Hadley Board of Selectmen
Belchertown Board of Health
Pioneer Valley Housing Association
Strategic Planning Initiative for Families and Youth (SPIFFY)
Town of Sunderland

LSAMP: Northeast Louis Stokes Alliance for Minority Participation (

<http://www.northeastern.edu/nelsamp/partners/university-of-massachusetts-amherst/>

):

This northeastern regional alliance is composed of the University of Massachusetts Amherst, Connecticut, Rhode Island, Northeastern University and Worcester Polytechnic Institute. Each partner participates in Alliance wide activities in addition to offering LSAMP-supported activities on their own campus. Currently, direct support to undergraduate students is offered in the form of research opportunities, pre-college and college academic preparation, and graduate school support. The program has also partnered with Susan Bronstein from Learning Resource Center and Greg Brown from Minority Engineering Program to recruit first year ALANA students to participate in the program.

Student Bridges Partners (

<http://www.studentbridges.org/sample-page-2/community-partnerships/>

):

Peck-Lawrence Full Service Community School
CHOICES run by Holyoke Community College
UMASS Amherst Upward Bound partnered with Commerce High School

Some of the exemplary community partnerships reviewed by the Carnegie Commission include (

<http://www.umass.edu/newsoffice/article/carnegie-foundation-names-umass-amherst->

):

The Adoption Mentoring Partnership is a collaboration between the Rudd Adoption Research Program in the psychological and brain

sciences department at UMass Amherst and Big Brothers, Big Sisters of Hampshire County. The program seeks to match UMass students who are adopted with adopted children in the community. Matched across a variety of factors, the mentors and children are able to form friendships grounded in the similarities between them, such as gender, race, ethnicity and adoption story. By providing a same-gender, same-race mentor for adopted children, the mentors become not only friends, but role models as well.

The Springfield/Holyoke Health Alliance for Research and Engagement (SHHARE) builds linkages among Public Health and Health Sciences faculty, students and community, applying principles of community-based participatory research to enhance joint efforts to solve pressing health problems in Holyoke and Springfield. Forums in Holyoke and Springfield have highlighted the work of community members, including the Holyoke Food and Fitness Policy Council, Gardening the Community, and Men of Color Health Awareness. SHHARE has also created a Who's Who in Public Health in Western Massachusetts database, and has funded numerous internships in community health organizations.

The Himalayan Climate Change Adaptation Programme provides design/build services to Kumik, a village in the Indian Himalayas, where chronic drought caused by climate change is forcing an entire community to move to a new site. Faculty work with villagers to help envision this process and plan with digital tools. Planning and design solutions will conserve scarce water, harness the region's abundant solar energy, incorporate local materials and building wisdom, and generate much-needed income, as well as opportunities for improving the health, energy-efficiency and economic conditions.

The Center for Women & Community for 30 years has provided free general and trauma-based counseling and information and referral services for all Hampshire County residents. Services include online and in-person information and referral services; empowerment-based short-term counseling, support groups and referrals; support services for survivors of sexual assault; a 24-hour crisis hotline; access to medical and legal advocacy; peer counseling in Spanish and English; specialized services for teens and the Latino community; academic and social service advocacy, and outreach services in schools and community organization in Spanish and English.

A brief description of successful community stakeholder engagement outcomes from the previous three years:

Campus Master Plan (2012):

<http://www.umass.edu/cp/mp.htm>

JTFSO Strategic Plan:

<http://www.umass.edu/chancellor/strategic-planning>

The website URL where information about the institution's community stakeholder engagement framework and activities is available:

<http://www.umass.edu/chancellor/strategic-planning>

Participation in Public Policy

Responsible Party

Ezra Small
Sustainability Manager
Physical Plant

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.

Submission Note:

In earlier years, Raymond S. Bradley, director of the Center for Climate Change, was one of many researchers affiliated with UMass Amherst who contributed to reports issued by the Intergovernmental Panel on Climate Change (IPCC). The reports earned the panel the 2007 Nobel Peace Prize, shared with environmentalist Al Gore.

The Nobel Committee granted the prize to the IPCC and Gore “for their efforts to build up and disseminate greater knowledge about man-made climate change, and to lay the foundations for the measures that are needed to counteract such change.” The three assessment reports issued explained the physical science basis of global climate change, predicted future impacts of climate change and suggested steps toward mitigation.

Research conducted by Bradley and Michael E. Mann detailed substantial human-induced rates of global warming in a 1999 paper that was the major highlight of the third IPCC assessment report. Mann, a former UMass Amherst post-doctoral researcher, is now a faculty member in the department of meteorology at Penn State University. Several former members of the UMass Climate System Research Center in the department of Geosciences also contributed to the reports.

“---” indicates that no data was submitted for this field

Does the institution advocate for national, state/provincial, or local public policies that support campus sustainability or that otherwise advance sustainability?:

Yes

A brief description of how the institution engages in public policy advocacy for sustainability, including the issues, legislation, and ordinances for or against which the institution has advocated:

Scott Jackson, an extension Associate Professor in the Department of Environmental Conservation at UMA is one of many researchers and educators at the university whose research and work on conservation, climate and other vital sustainability related topics has

informed, impacted and helped shape numerous local, state, federal and global policies on green initiatives over the last decade and beyond.

Jackson's contributions to conservation in Massachusetts include co-founding the River and Stream Continuity Project, which developed standards for culverts and bridges to help minimize their impact on wildlife and river health and created approaches for prioritizing replacement of these road-stream crossings. These methods are now being used across New England and the northeast to protect and restore river continuity.

Jackson also led the use of underpass systems to facilitate wildlife movement across roads and in development of methods for evaluating the effectiveness of animal-passage structures, beginning with construction and evaluation of the Henry Street tunnels in Amherst in 1987, the first such structures in North America. This early experiment helped establish the foundation for widespread adoption of wildlife crossing structures in the U.S. and Canada.

Jackson also co-led the statewide Critical Linkages connectivity assessment completed in 2013 by the UMass Amherst landscape ecology program. Critical Linkages identifies the dams, road-stream crossings and road segments most important for conservation and transportation agencies to address in order to minimize the impact of these structures on wildlife movement and viability, while maintaining a safe and reliable transportation infrastructure.

For all of these efforts Jackson was named 2013 MA Conservationist of the Year by the Nature Conservancy in Massachusetts.

A brief description of other political positions the institution has taken during the previous three years:

A brief description of political donations the institution made during the previous three years (if applicable):

The website URL where information about the institution's advocacy efforts is available:

<http://www.umass.edu/newsoffice/article/jackson-named-conservationist-year-nature>

Responsible Party

Ezra Small
Sustainability Manager
Physical Plant

Criteria

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

Submission Note:

<http://www.workersrights.org/about/as.asp>

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

Is the institution a member of the Worker Rights Consortium?:

Yes

Is the institution a member of the Fair Labor Association? :

Yes

Has the institution expressed an intention to participate in the WRC's Designated Suppliers Program? :

Yes

The website URL where information about the institution's participation in the WRC, FLA, and/or DSP is available:

<http://www.fairlabor.org/affiliate/university-massachusetts>

Hospital Network

Responsible Party

Ezra Small
Sustainability Manager
Physical Plant

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.

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

Is the institution a member of the Global Green and Healthy Hospitals Network?:

Is the institution a member of the Healthier Hospitals Initiative?:

Is the institution a member of Practice Greenhealth?:

A brief description of the hospital's sustainability initiatives:

The website URL where information about the hospital's sustainability initiatives is available:

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

Ezra Small

Sustainability Manager

Physical Plant

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 (MtCO_{2e}) per gross square foot (0.002 MtCO_{2e} per gross square metre) of floor area.

Performance for Part 3 of this credit is assessed using EUJ-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:

GHG data for this submission corresponds with our previous GHG inventory with ACUPCC/CA-CP process which was FY13. We plan to conduct a FY14 GHG inventory but not in time for this report.

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	No
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:

This data is based on the Fiscal Year 2013 (July 2012-June 2013)

Scope I and II emissions mainly come from collecting fuel consumption into a report for the MA DOER Leading by Example Office. Emission factors for each fuel type are used to calculate our Scope I and II emissions (above). Scope III emissions include employee air travel and commuter travel of students and employees and campus sold waste.

SCOPE I:

Stationary Combustion: CA-CP Calculations

Mobile Combustion: CA-CP Calculations

SCOPE II:

Purchased Electricity: CA-CP Calculations

SCOPE III:

Commuting & Air Travel:

UMass Amherst Calculations: Green Building researchers collected and analyzed this data from the parking and procurement offices and

scientifically calculated scope III emissions (commuting and air travel) using this data.

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:

Sightlines verifies our ACUPCC report

Scope 1 and Scope 2 GHG emissions::

	Performance Year	Baseline Year
Scope 1 GHG emissions from stationary combustion	113,118 <i>Metric Tons of CO2 Equivalent</i>	148,337 <i>Metric Tons of CO2 Equivalent</i>
Scope 1 GHG emissions from other sources	1,550.68 <i>Metric Tons of CO2 Equivalent</i>	1,953 <i>Metric Tons of CO2 Equivalent</i>
Scope 2 GHG emissions from purchased electricity	11,107.82 <i>Metric Tons of CO2 Equivalent</i>	16,328 <i>Metric Tons of CO2 Equivalent</i>
Scope 2 GHG emissions from other sources	0 <i>Metric Tons of CO2 Equivalent</i>	0 <i>Metric Tons of CO2 Equivalent</i>

Figures needed to determine total carbon offsets::

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

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

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

A brief description of the composting and carbon storage program:

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

Figures needed to determine “Weighted Campus Users”::

	Performance Year	Baseline Year
Number of residential students	12,420	11,539
Number of residential employees	0	0
Number of in-patient hospital beds	0	0
Full-time equivalent enrollment	26,851	22,498
Full-time equivalent of employees	6,207	5,838
Full-time equivalent of distance education students	774	388

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

	Start Date	End Date
Performance Year	July 1, 2012	July 1, 2013
Baseline Year	July 1, 2004	July 1, 2005

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

2004 was the peak emissions year for the campus. 2005 data is the best because the 2011 v1.0 report required us to report 2005 as baseline.

Gross floor area of building space, performance year:

11,401,341 *Square Feet*

Floor area of energy intensive building space, performance year:

	Floor Area
Laboratory space	2,350,371 <i>Square Feet</i>
Healthcare space	68,362 <i>Square Feet</i>
Other energy intensive space	439,836 <i>Square Feet</i>

Scope 3 GHG emissions, performance year::

	Emissions
Business travel	12,285 <i>Metric Tons of CO2 Equivalent</i>
Commuting	14,763 <i>Metric Tons of CO2 Equivalent</i>
Purchased goods and services	0 <i>Metric Tons of CO2 Equivalent</i>
Capital goods	---
Fuel- and energy-related activities not included in Scope 1 or Scope 2	0 <i>Metric Tons of CO2 Equivalent</i>
Waste generated in operations	933.88 <i>Metric Tons of CO2 Equivalent</i>
Other categories (please specify below)	0 <i>Metric Tons of CO2 Equivalent</i>

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

N/A

A copy of the most recent GHG emissions inventory:

The website URL where the GHG emissions inventory is posted:

<http://rs.acupcc.org/ghg/2933/>

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

The campus is committed to ACUPCC carbon neutrality by 2050, state goals by 2020 and 3% energy reductions per year through a Western MA Utilities (WMECO) agreement (MOU) but the reality is the campus continues to grow at an unprecedented rate, adding hundreds of thousands of square footage and renovating older buildings with more energy intensive air conditioning systems.

Energy Efficiency in our buildings and renewable energy projects on campus will reduce our energy consumption and overall GHG emissions over the course of the next 5 years but not enough to reach our Massachusetts Executive Order 484 goals of 35% building energy consumption and 40% total GHG emissions based on a 2002-2004 baseline. The campus has conducted a full Energy Master Plan which calculates that the campus can reduce energy consumption and emissions by 10% from energy efficiency and 4% with solar energy.

Notable efforts to reduced emissions over the last 3 years include:

- fuel switching at the central heating plant (LNG reducing oil)
- renewable energy planning (solar thermal and solar PV)
- building energy efficiency measures (E+ Program)
- water conservation and reuse efforts in cooling towers and central heating plant
- continuous commissioning
- LEED building construction
- Sustainability Fund
- Fleet reduction, alternative vehicle procurement, and electric vehicle charging stations (first Level III charger in state of MA)

Outdoor Air Quality

Responsible Party

Ezra Small
Sustainability Manager
Physical Plant

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.

Submission Note:

Ozone (O₃):

We don't have any direct O₃ sources. NO_x and VOCs are precursors. But actual ozone would be for something like water treatment, thus 0 emissions.

Other standard categories of air emissions identified in permits and/or regulations:

VOC 2.5 TPY

NH₃ 1.2 TPY

Total: 3.7 TPY

"---" 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:

The campus EH&S has an anti-idling policy for all vehicles on campus with the exception of some emergency and law enforcement.

All employees who operate a UMass vehicle must take the anti-idling training:

<https://www.ehs.umass.edu/motor-vehicle-idling-policy>

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 majority of emissions are created by our Central Heating Plant. NO_x, CO and NH₃ emissions are measured using our Chemical Emissions Monitoring (CEMs) Equipment. SO_x emissions are based on a maximum sulfur content fuel of 0.0015% for oil and 0.8 gr/100cf for gas. Other pollutants emissions are based on stack test data and annual fuel usage. The CHP Emergency generator emissions are based on our emission factors in our Operating permit and NH₃ emission factors from AP-42.

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

	Weight of Emissions
Nitrogen oxides (NO_x)	18.50 <i>Tons</i>
Sulfur oxides (SO_x)	2.20 <i>Tons</i>
Carbon monoxide (CO)	4.80 <i>Tons</i>
Particulate matter (PM)	25 <i>Tons</i>
Ozone (O₃)	0 <i>Tons</i>
Lead (Pb)	0.00 <i>Tons</i>
Hazardous air pollutants (HAPs)	2.56 <i>Tons</i>
Ozone-depleting compounds (ODCs)	0.06 <i>Tons</i>
Other standard categories of air emissions identified in permits and/or regulations	3.70 <i>Tons</i>

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

This can be found in the UMass Amherst Energy Master Plan, published December, 2014.

Initiatives include Liquid Natural Gas (reduces oil consumption at the CHP), E+ Program (energy conservation in campus buildings) and continuous commissioning of our existing buildings.

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

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

Ezra Small

Sustainability Manager

Physical Plant

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 University currently does not have any LEED O&M certified buildings nor sustainable building operations and maintenance guidelines or policies. However, our 2004 Campus Design Guidelines does have a chapter (10.1) "Responsible Use of Energy and Natural Resources." We do not feel that this chapter is sufficient enough for claiming square footage of buildings that fall under a operations and maintenance guideline or policy but this chapter does provide a foundation for efforts in creating a policy.

Total building space that meets "Eligible Buildings Criteria" comes from Campus Planning/Space Asset Management and is the FY14 data.

"---" 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)	No
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:

None

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

12,239,033 *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 <i>Square Feet</i>
3rd Highest Level (e.g. LEED Silver)	0 <i>Square Feet</i>
2nd Highest Level (e.g. LEED Gold)	0 <i>Square Feet</i>
Highest Achievable Level (e.g. LEED Platinum)	0 <i>Square Feet</i>

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	<i>0 Square Feet</i>
Mid-Level	<i>0 Square Feet</i>
Highest Achievable Level	<i>0 Square Feet</i>

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	<i>0 Square Feet</i>
4th Highest Level	<i>0 Square Feet</i>
Mid-Level	<i>0 Square Feet</i>
2nd Highest Level	<i>0 Square Feet</i>
Highest Achievable Level	<i>0 Square Feet</i>

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

0 Square Feet

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

0 Square Feet

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

[Design_Guidelines10-04.pdf](#)

The date the guidelines or policies were formally adopted:

Sept. 1, 2004

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

None

A brief description of how the institution ensures compliance with sustainable building operation and maintenance guidelines and policies:

None

The website URL where information about the institution's certified buildings and/or sustainable operations and maintenance guidelines or policies is available:

http://www.umass.edu/fp/uploads/textWidget/wysiwyg/documents/Design_Guidelines10-04.pdf

Building Design and Construction

Responsible Party

Ezra Small
Sustainability Manager
Physical Plant

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:

All buildings constructed since 2008 are built to the LEED Silver minimum requirement.

"---" 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:

LEED GOLD CERTIFIED: College of Natural Sciences Research and Education Greenhouse - LEED BD+C: New Construction v3 - LEED 2009 (16,085 SF)

<http://www.usgbc.org/projects/umass-research-and-education-greenhouse>

LEED GOLD CERTIFIED: UMass Amherst Police Station - LEED BD+C: New Construction v2 - LEED 2.2 (27,250 SF)

<http://www.usgbc.org/projects/amherst-campus-police-station>

LEED GOLD CERTIFIED: George N. Parks Minuteman Marching Band Building - LEED BD+C: New Construction v2 - LEED 2.2 (21,424 SF)

<http://www.usgbc.org/projects/george-n-parks-minuteman-marching-band>

LEED GOLD CERTIFIED: Hampshire Dining Commons - LEED BD+C: New Construction v3 - LEED 2009 (46,001 SF)

<http://www.usgbc.org/projects/uma-hampshire-dc-2012-renovation>

<http://www.usgbc.org/projects/univ-mass-amherst-football-training-fa>

LEED GOLD CERTIFIED: Life Science Lab - LEED BD+C: New Construction v2 - LEED 2.2 (395,260)

LEED Registered:

LSL II: LEED ID+C: Commercial Interiors v3 - LEED 2009

Commonwealth Honors College Housing Complex (CHC)

Lincoln Campus Center Dining Renovation

Integrated Learning Center (ILC)

Furcolo Hall Renovation

South College Academic Facility

Total floor area of eligible building space (design and construction):

561,020 *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 <i>Square Feet</i>
3rd Highest Level (e.g. LEED Silver)	0 <i>Square Feet</i>
2nd Highest Level (e.g. LEED Gold)	561,020 <i>Square Feet</i>
Highest Achievable Level (e.g. LEED Platinum)	0 <i>Square Feet</i>

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	0 <i>Square Feet</i>
Mid-Level	0 <i>Square Feet</i>
Highest Achievable Level	0 <i>Square Feet</i>

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	<i>0 Square Feet</i>
4th Highest Level	<i>0 Square Feet</i>
Mid-Level	<i>0 Square Feet</i>
2nd Highest Level	<i>0 Square Feet</i>
Highest Achievable Level	<i>0 Square Feet</i>

Floor area of building space certified Living under the Living Building Challenge:

0 Square Feet

Floor area of building space that is certified at any level under other green building rating systems for new construction and major renovations:

0 Square Feet

Floor area of building space that was designed and constructed in accordance with green building policies or guidelines but NOT certified:

0 Square Feet

A copy of the guidelines or policies :

[gbGuidelines.pdf](#)

The date the guidelines or policies were adopted:

June 1, 2011

A brief description of the green building guidelines or policies and/or a list or sample of buildings covered:

A brief description of how the institution ensures compliance with green building design and construction guidelines and policies:

In September of 2004 UMass Amherst adopted Construction Design Guidelines that included a policy on Responsible Use of Energy and Natural Resources and specifically directed project teams to follow the LEED Rating System for new construction. As a user agency of

the Massachusetts Division of Capital Asset Management (DCAM), UMass is required to meet all facility design and management policies guidelines adopted by the state. Under Executive Order 484 – Leading By Example: Clean Energy and Efficient Buildings, signed by Governor Patrick On April 18, 2007, all new construction and major renovation over 20,000 square feet must meet MassLEED Plus requirements, achieve 20% above the Mass Energy Code, or meet the Advanced Buildings energy criteria. In addition, UMass Amherst has made a commitment to achieve LEED-Silver or better, and has developed Green Building Guidelines that facilitate and streamline the LEED process and challenge the University with creative, resourceful and innovative strategies for sustainable buildings. UMass Amherst is also in the process of developing new green building guidelines for LEED v4.

The website URL where information about the institution’s certified buildings and/or green building design and construction guidelines or policies is available:

<http://www.umass.edu/fp/gbGuidelines.pdf>

Responsible Party

Ezra Small
Sustainability Manager
Physical Plant

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.

Submission Note:

This data is the Sum of Net Assignable Area and comes from Tririga Space and Asset Database.

"---" 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:

9,343,825 *Square Feet*

Gross floor area of building space:

9,343,825 *Square Feet*

A brief description of the institution's indoor air quality program(s):

The department of Environmental Health and Safety has an emergency call system for unusual and dangerous smells. Complaints can also be registered on the physical plant website in which EHS will take the complaint if there is a potential health risk. Audits of buildings are regularly done. All complaints are followed up on in a timely manner.

The website URL where information about the institution's indoor air quality program(s) is available:

<http://www.ehs.umass.edu/>

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

Rachel Dutton

Sustainability Coordinator

Auxillary Services

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:

For the last year, UMass Dining has been working to transform one of our four dining commons into a model for sustainability, health and wellness that is cost defensible. This grant funded

To do this, we have needed to explore cutting edge and creative solutions in menu design, operational culture, and local food sourcing. We will be releasing a how-to-guide highlighting best practices for a local/sustainable food initiative in 2015.

"---" 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:

14

A copy of an inventory, list or sample of sustainable food and beverage purchases:

[SustainabilitySample.jpg](#)

An inventory, list or sample of sustainable food and beverage purchases:

The attached sample is from our working spreadsheet of sustainable/local food sourcing. This is specifically for our local dairy purchases for residential and retail locations. This particular spreadsheet is comparing the first half of FY14 to the first half of FY15. There are similar sheets for all categories of food items.

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:

14

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:

[AASHEsample.png](#)

An inventory, list or sample of on-site franchise, convenience store, vending machine, and/or concessions food and beverage purchases that are sustainably produced:

A brief description of the sustainable food and beverage purchasing program:

-Currently halfway through a grant project to increase local food sourcing and creation of a cost defensible model for other institutions.

- Signed Real Food Challenge Campus Commitment

- One local farm (Joe Czajkowski Farm, just 2 miles from campus) brokers for additional local farms in order to allow UMass Dining to

source as much local produce as possible. Because of this relationship we are able to source local produce from a consortium of about 20 local farms

- All seafood served through UMass Dining is certified sustainably sourced using Seafood WATCH guidelines
- 100% cage-free local, heirloom hard shell eggs
- We source produce from the UMass Student Farming Enterprise and our on-campus permaculture gardens in addition to our local farms
- Working to supply the dining commons with more local vegetables off season using individually quick frozen (IQF) techniques to extend the time that we can supply local fruits and vegetables
- We source free range turkeys from Diemand Farms located within 20 miles of campus
- We have an agreement with our prime produce vendor that local and regionally sourced items should be used first before sourcing elsewhere.
- We source some free range local chicken, beef and pork within 250 miles from campus for use in Hampshire Dining Commons.
- 100% local honey
- Local maple syrup
- Sourcing more underutilized, local "trash fish"
- All spring rolls are sourced from a local family restaurant who hand roll the product. About a third contain local vegetables when seasonally appropriate.

A brief description of the methodology used to track/inventory sustainable food and beverage purchases:

A 2 person team composed of the Sustainable Food Systems Coordinator and an outside consultant work with UMass Dining's purchasing software, FoodPro, to research past spending habits of local and sustainable foods. Through this process, the team is able to have an in depth understanding of what was purchased when and to where it went. This advises projections for future spending to ensure that UMass Dining meets its local/sustainable sourcing goals. This is an in-depth process that is then presented to a team including sustainability, purchasing, and dining for review and ultimate approval.

Total annual food and beverage expenditures:

22,376,752.20 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	Yes
Dining operations and catering services operated by a contractor	No	No
Franchises	Yes	Yes
Convenience stores	Yes	Yes
Vending services	Yes	No

Concessions	Yes	Yes
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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	Yes
Signatory of the Real Food Campus Commitment (U.S.)	Yes

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://localumass.com/>

Low Impact Dining

Responsible Party

Rachel Dutton
Sustainability Coordinator
Auxillary Services

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:

97

A brief description of the methodology used to track/inventory expenditures on animal products:

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”):

There is always a vegan as well as vegetarian options for every meal. There is a station in every dining hall where hot meals can be acquired as well as an all day salad bar if the hot meal does not meet the student's liking.

A brief description of other efforts the institution has made to reduce the impact of its animal-derived food purchases:

The website URL where information about where information about the vegan dining program is available:

<http://www.umassnutrition.com/food-allergies>

Annual dining services expenditures on food:

Annual dining services expenditures on conventionally produced animal products:

Annual dining services expenditures on sustainably produced animal products:

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

Ezra Small
Sustainability Manager
Physical Plant

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:

Our campus began benchmarking this in response to Massachusetts Executive Order 484, and our baseline year for comparison is 2002-2004 3 year average. Although our total energy building consumption has gone up since then, it dropped considerably in FY05 and FY06 after implantation of our energy savings plan (assisted by Johnson Controls).

All energy consumption and SF data originates from the calculations that MA DOER does with our annual LBE fuel/electricity consumption report.

"---" 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	2,071,653 <i>MMBtu</i>	1,756,048 <i>MMBtu</i>

Purchased electricity and steam:

	Performance Year	Baseline Year
Grid-purchased electricity	130,300 <i>MMBtu</i>	380,353 <i>MMBtu</i>

District steam/hot water	0 MMBtu	0 MMBtu
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Gross floor area of building space::

	Performance Year	Baseline Year
Gross floor area	12,239,033 <i>Gross Square Feet</i>	9,989,626 <i>Gross Square Feet</i>

Floor area of energy intensive space, performance year::

	Floor Area
Laboratory space	2,745,631 <i>Square Feet</i>
Healthcare space	68,362 <i>Square Feet</i>
Other energy intensive space	

Degree days, performance year (base 65 °F / 18 °C)::

	Degree Days
Heating degree days	6,410
Cooling degree days	942

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	July 1, 2012	July 1, 2013

Baseline Year	July 1, 2001	July 1, 2004
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A brief description of when and why the building energy consumption baseline was adopted:

UMass Amherst is mandated to report annual building energy consumption to the Massachusetts Department of Energy Resources (MA DOER) Leading by Example Program (LBE) which administers the goals of the Executive Order 484. The LBE program compares annual building energy consumption and overall emissions data to a 2002-2004 3 year average baseline.

A brief description of any building temperature standards employed by the institution:

Most of the buildings on campus are controlled by a Building Automation System in a coordinated web accessible campus architecture which uses scheduling for temperature setbacks during unoccupied times.

A brief description of any light emitting diode (LED) lighting employed by the institution:

The University has engaged in a number of LED conversion programs over the last three to four years. In 2011, all of the traffic lights on campus were converted to LED's and between 2013 and 2014 the campus ordered and installed over 5,000 LED's from the leading by Example Department of Energy Resources LED Replacement Bulb Project. These bulbs have been installed throughout campus in auditoriums, campus center, Fine Arts Center, academic classroom building lobbies, administration buildings, and residence halls.

A brief description of any occupancy and/or vacancy sensors employed by the institution:

Room by room occupancy sensors, specifically motion and infrared, for HVAC and lighting are used throughout campus in multiple buildings, particularly the newer buildings.

A brief description of any passive solar heating employed by the institution:

A brief description of any ground-source heat pumps employed by the institution:

Two campus buildings not on the central steam system have ground source heat pump technology. These two buildings are the Research Administration Building and the LEED certified UMass Police Station.

A brief description of any cogeneration technologies employed by the institution:

<http://www.umass.edu/sustainability/green-campus/award-winning-central-heating-plant>

A brief description of any building recommissioning or retrofit program employed by the institution:

A brief description of any energy metering and management systems employed by the institution:

Johnson Controls Metasys is the name of the building automation system and is used along with individual building steam water and electric meters.

"Metasys is the most comprehensive building management system available today. It provides the essential instrumentation and control you need to coordinate, regulate and manage your building systems."

A brief description of the institution's program to replace energy-consuming appliances, equipment and systems with high efficiency alternatives:

A brief description of any energy-efficient landscape design initiatives employed by the institution:

A brief description of any vending machine sensors, lightless machines, or LED-lit machines employed by the institution:

For all beverage machines, UMass partners with Coca-Cola and all of their machines on campus have sensors to conserve energy.

A brief description of other energy conservation and efficiency initiatives employed by the institution:

The website URL where information about the institution's energy conservation and efficiency initiatives is available:

<http://www.umass.edu/sustainability/green-campus/energy>

Responsible Party

Ezra Small
Sustainability Manager
Physical Plant

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:

See internal notes for data methodology.

"---" 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	54 MMBtu
Option 2: Non-electric renewable energy generated on-site	0 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)	0 MMBtu

Total energy consumption, performance year:

2,071,653 *MMBtu*

A brief description of on-site renewable electricity generating devices :

The UMass Research Farm in South Deerfield is a 358-acre agronomy and vegetable farm that conducts research on ethnic and other vegetable crops, agronomic and bioenergy crops, organic agriculture and pasture. The farm has a student-run vegetable project and also trains students in artificial insemination of cattle. Faculty, extension staff, and graduate students conduct applied research and are assisted by talented technicians, field staff and undergraduate students. Since the spring of 2010, it has also been home to a 106-panel, 25 kilowatt PV project.

It has received support from the Massachusetts Society for Promoting Agriculture, Center for Agriculture, UMass Facilities, the Massachusetts Clean Energy Center (MassCEC) and Massachusetts Department of Agricultural Resources. The effort represents a public-private partnership with Berkshire Management Group and Diversified Construction Services, LLC. joining in to bring this demonstration project to its current stage..

These systems are placed either on non food-producing soils, marginal soils, dedicated centralized towers, or sloping roof structures that allow land use underneath or can also serve as storage facilities.

The research project has three goals. First, it examines and documents the results of implementing ground-mounted solar energy technology on farm land, while simultaneously producing a crop. It also is designed to produce an electric power source to offset power usage at the research farm. Finally, the project will demonstrate how this type of PV can be implemented by a farm in a cost effective manner.

UMass Amherst raised funding for this effort from a combination of sources, including the Massachusetts Society for Promoting Agriculture, UMass Extension Center for Agriculture, the Massachusetts Clean Energy Center (MassCEC) and DAR. Two private sector interests are also participating, including Berkshire Management Group Director Michael Lehan and David Marley, manager of Diversified Construction Services, LLC.

A brief description of on-site renewable non-electric energy devices:

A brief description of off-site, institution-catalyzed, renewable electricity generating devices:

A brief description of the RECs and/or similar renewable energy products:

The website URL where information about the institution's renewable energy sources is available:

<http://www.umass.edu/sustainability/green-campus/solar-array-umass-research-farm>

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

Ezra Small
Sustainability Manager
Physical Plant

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: <ul style="list-style-type: none">• Using least-toxic chemical pesticides,• Minimum use of chemicals, and• Use of chemicals only in targeted locations and only for targeted species

<p>2) Sustainable Landscape Management Program</p>	<p>The program includes formally adopted guidelines, policies and/or practices that cover all of the following:</p> <ul style="list-style-type: none"> • 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
<p>3) Organic, Certified and/or Protected</p>	<p>Protected areas and land that is:</p> <ul style="list-style-type: none"> • 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:

Pam Monn and her Landscape Management staff are in the process of developing an IPM Plan for the campus grounds. This credit will be updated in 2016.

Protected lands information comes from Paige Warren, professor in Wildlife Conservation. 1,926 acres of the total campus area includes the two protected forest areas that are NOT on the main campus property, they are properties owned by UMass and are used as demonstration and research forests in nearby towns.

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

Figures required to calculate the total area of managed grounds::

	Area
Total campus area	3,326 Acres
Footprint of the institution's buildings	82.50 Acres
Area of undeveloped land, excluding any protected areas	2,316 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	0 Acres
Managed organically, third party certified and/or protected	0 Acres

A copy of the IPM plan:

The IPM plan :

We do not have a formalized IPM program. This is being developed in 2015.

A brief summary of the institution's approach to sustainable landscape management:

This is being developed in 2015.

A brief description of how the institution protects and uses existing vegetation, uses native and ecologically appropriate plants, and controls and manages invasive species:

UMass Landscape Management has put together a palate of native plants that are not only native but resistant to drought. When new projects arises we choose from that palate. Each new construction project on campus meets at least a LEED Silver rating and the Green Building Guidelines for UMass have identified the "Water Efficient Landscaping" credit as "High Priority" and "easy Feasibility" for UMass to pursue.

A brief description of the institution's landscape materials management and waste minimization policies and practices:

We compost the waste from grounds keeping on campus. We then use that compost around campus in other grounds keeping projects.

In FY2014, UMass Office of Waste Management and Landscape Services composted 300 tons of yard waste and leaves

A brief description of the institution's organic soils management practices:

We have an acre test plot managed organically. NOT third party certified and/or protected. Don't have organic soils on campus.

A brief description of the institution's use of environmentally preferable materials in landscaping and grounds management:

We minimize use of fertilizer and chemical application to lawn when we can choose environmentally preferable materials.

A brief description of how the institution restores and/or maintains the integrity of the natural hydrology of the campus:

Installation of multiple (four) rain garden on campus to collect the water run off.

A brief description of how the institution reduces the environmental impacts of snow and ice removal (if applicable):

Here at UMass we use a product that consists of biproduct of materials from distilleries to melt the salt on our side walks. This allows us to avoid using harsh chemicals to defrost our sidewalks. See notes section for product specs..

A brief description of any certified and/or protected areas:

The two main forests are:

1. Mt. Toby Demonstration Forest: It was acquired in 1916 and consists of 755 acres.
2. Cadwell Memorial Forest: It was acquired in 1952 and consists of 1171 acres.

These two forests are listed under Article 97 Legislation of Massachusetts, which requires that the land is for open space, conservation, and environmental education and environmental research and other related natural resource purposes consistent with Article 97. This also means that the land of these two forests cannot be used for any other purposes, unless Massachusetts legislation changes the use of the [STARS Reporting Tool](#) | [AASHE](#)

land.

Is the institution recognized by the Arbor Day Foundation's Tree Campus USA program (if applicable)?:

No

The website URL where information about the institution's sustainable landscape management programs and practices is available:

Responsible Party

Ezra Small

Sustainability Manager

Physical Plant

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.

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

Does the institution own or manage land that includes or is adjacent to legally protected areas, internationally recognized areas, priority sites for biodiversity, and/or regions of conservation importance?:

Yes

A brief description of any legally protected areas, internationally recognized areas, priority sites for biodiversity, and/or regions of conservation importance on institution owned or managed land:

The two main forests are:

1. Mt. Toby Demonstration Forest: It was acquired in 1916 and consists of 755 acres.
2. Cadwell Memorial Forest: It was acquired in 1952 and consists of 1171 acres.

These two forests are listed under Article 97 Legislation of Massachusetts, which requires that the land is for open space, conservation, and environmental education and environmental research and other related natural resource purposes consistent with Article 97. This also means that the land of these two forests cannot be used for any other purposes, unless Massachusetts legislation changes the use of the land.

Has the institution conducted an assessment or assessments to identify endangered and vulnerable species with habitats on institution-owned or –managed land?:

Yes

Has the institution conducted an assessment or assessments to identify environmentally sensitive areas on institution-owned or –managed land?:

Yes

The methodology(-ies) used to identify endangered and vulnerable species and/or environmentally sensitive areas and any ongoing assessment and monitoring mechanisms:

Campus planning has done a full assessment of the campus natural systems on the campus. This information can be found online here:

<http://www.umass.edu/cp/cns.htm>

Wildlife assessments are conducted by students in the Natural Resources Conservation (NRC) 564 Wildlife Habitat Management course taught by professor Paige Warren. Their semester-long projects aim to develop comprehensive habitat management plans for wildlife on campus. They are provided guidance on how to make their plans compatible with other campus wide initiatives such as the Campus Master Plan and the Campus Sustainability programs. Most recent year assessed was 2014.

A brief description of identified species, habitats and/or environmentally sensitive areas:

Prexy's Ridge Forest: Prexy's Ridge Forest is an old growth forest on the westward steep slope southeast of the intersection of Eastman Lane and North Pleasant Street. Part of the Waugh Arboretum, the Forest is a unique educational, research, and recreational asset for the campus and should be preserved.

A brief description of plans or programs in place to protect or positively affect identified species, habitats and/or environmentally sensitive areas:

Every time we go to build a new building, the process always includes the consideration for the preservation of wildlife habitats. Preservation of wildlife habitat is rooted deep in the culture of planning at UMass Amherst. The UMass Amherst Extension Citizen Planner Program offers resources for developing bi-laws in local governments for wildlife habitat protection (see link below).

The website URL where information about the institution's biodiversity policies and programs(s) is available:

http://www.umass.edu/masscptc/bylaws/WetandWild_Mo.html

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

Ezra Small

Sustainability Manager

Physical Plant

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:

This data comes from our OIT office and includes Dell, Lenovo, Apple, and HP computers/laptops and monitors.

"---" 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:

The electronics purchasing policy, directive, or guidelines :

From:

<http://www.it.umass.edu/support/hardware/recommended-minimum-computer-configurations-windows>

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"Sustainability:

We recommend models of computers that have at least an EPEAT Silver rating (preferably EPEAT Gold). These computers meet the latest ENERGY STAR specifications and are designed to be easily recycled. Learn more about the Electronic Product Environmental Assessment Tool (EPEAT)."

A brief description of steps the institution has taken to ensure that the purchasing policy, directives, or guidelines are followed:

The guidelines for purchasing PC or Mac computers are sent to all incoming students, and printed information is also available in their orientation packets. They are also available on the Office of Institutional Support Website.

Mac guidelines:

<http://www.oit.umass.edu/support/hardware/recommended-and-minimum-computer-configurations-macin>

tosh

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	3,178.08 US/Canadian \$
EPEAT Gold	644,496.83 US/Canadian \$

Total expenditures on desktop and laptop computers, displays, thin clients, televisions, and imaging equipment:

647,674.91 US/Canadian \$

The website URL where information about the institution's electronics purchasing policy, directive, or guidelines is available:

<http://www.oit.umass.edu/support/hardware/recommended-minimum-computer-configurations-windows>

Cleaning Products Purchasing

Responsible Party

Ezra Small
Sustainability Manager
Physical Plant

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:

The expenditure data (Part 2) of this credit comes from the Physical Plant Custodial Services Manager Donald Sullivan and Physical Plant Buyer Michael Rossi. Custodial Services cleans all classroom and administrative buildings on campus (majority of campus buildings).

There are two other cleaning systems at UMass in Residential Life (45 residence halls) and Auxiliary Services (Campus Center, Retail Dining and Dining Halls). Each entity uses its own cleaning systems both of which use high percentage of Green Seal certified products. Auxiliary Services uses the OS-1 cleaning system which has won national environmental awards.

Contact in Residential Life: Capitol Projects Space Manager, Jenna Rostek

Contact in Auxiliary Services: Purchasing Manager, Chris Howland

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

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:

[UMAGreenCleaningPolicy.pdf](#)

The green cleaning product purchasing policy, directive, or guidelines:

A brief description of steps the institution has taken to ensure that the purchasing policy, directives, or guidelines are followed:

Director of Custodial Services, Don Sullivan oversees the verification of purchasing of green cleaning products within his department. Don also make presentations to building coordinators about adhering to the policy.

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:

69,264.70 US/Canadian \$

Total expenditures on cleaning and janitorial products:

70,000 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?:

A brief description of the institution's low-impact, ecological cleaning program:

A copy of the sections of the cleaning contract(s) that reference certified green products:

[2014 GREEN PRODUCT LIST.xlsx](#)

The sections of the cleaning contract(s) that reference certified green products:

The website URL where information about the institution's green cleaning initiatives is available:

<http://www.umass.edu/procurement/>

Office Paper Purchasing

Responsible Party

Ezra Small
Sustainability Manager
Physical Plant

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:

This data comes from the vendor (W.B. Mason) campus sales manager.

"---" 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?:

No

A copy of the paper purchasing policy, directive or guidelines:

The paper purchasing policy, directive or guidelines:

A brief description of steps the institution has taken to ensure that the purchasing policy, directives, or guidelines are followed :

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	1,163.50 <i>US/Canadian \$</i>
30-49 percent	118,154.77 <i>US/Canadian \$</i>
50-69 percent	464.13 <i>US/Canadian \$</i>
70-89 percent (or FSC Mix label)	0 <i>US/Canadian \$</i>
90-100 percent (or FSC Recycled label)	3,263.03 <i>US/Canadian \$</i>

Total expenditures on office paper :

251,367 *US/Canadian \$*

The website URL where information about the paper purchasing policy, directive, or guidelines is available:

Inclusive and Local Purchasing

Responsible Party

Ezra Small
Sustainability Manager
Physical Plant

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.

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

Does the institution have an institution-wide stated intent to support disadvantaged businesses, social enterprises, and/or local community-based businesses?:

Yes

A copy of the policy, guidelines or directive governing inclusive and local purchasing:

[purchasing_policy.pdf](#)

The policy, guidelines or directive governing inclusive and local purchasing:

From page 2 of the UMass System policy under "General Bid Requirements":

The University's commitment to the principles of Affirmative Action shall be applied to purchasing with the objective of achieving and fostering greater minority and women-owned business enterprise participation in University procurement activity and encouraging socially or economically disadvantaged business owners to respond to invitations to bid on University business.

Does the institution wish to pursue Part 2 of this credit (inclusive and local expenditures)?:

No

The percentage of total purchases from disadvantaged businesses, social enterprises and/or local community-based businesses:

The website URL where information about the institution's inclusive and local purchasing policies and/or program is available:

http://media.umassp.edu/massedu/policy/purchasing_policy.pdf

Life Cycle Cost Analysis

Responsible Party

Ezra Small
Sustainability Manager
Physical Plant

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.

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

Does the the institution employ Life Cycle Cost Analysis (LCCA) as a matter of policy and practice when evaluating energy and water-using products and systems?:

No

Does the institution employ LCCA as a matter of policy and practice across the operations of the entire institution (i.e. all divisions)?:

No

A brief description of the LCCA policy(ies) and practice(s):

The website URL where information about the institution's LCCA policies and practices is available:

Guidelines for Business Partners

Responsible Party

Ezra Small

Sustainability Manager

Physical Plant

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.

"---" 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?:

Some

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?:

Some

A copy of the policies, guidelines, and/or agreements with the institution's business partners (or a representative sample):

The policies, guidelines, and/or agreements with the institution's business partners (or a representative sample):

Since the University does not have a sustainability purchasing/procurement policy the only know vendors that are covered by sustainability policies are those that bid for new construction and major renovations of buildings which falls within the campus green building standards and guidelines here:

<http://www.umass.edu/sustainability/green-campus/green-building-guidelines>

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:

UMass Amherst, as a state agency of the Commonwealth of Massachusetts, is required to meet the requirements of the Executive Order 515, Establishing an Environmental Purchasing Policy, which requires agencies to set initiatives that focus on Energy Efficient Products, Toxics Reduction, Recycled Content/Waste Minimization, and Purchasing Sustainable Products.

The website URL where information about the institution's guidelines for its business partners is available:

<http://www.umass.edu/procurement/policyindex.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

Responsible Party

Ezra Small
Sustainability Manager
Physical Plant

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:

This data comes directly from Bill Watts, Transportation Services Fleet Manager

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

Total number of vehicles in the institution's fleet :

485

Number of vehicles in the institution's fleet that are::

	Number of Vehicles
Gasoline-electric, non-plug-in hybrid	14
Diesel-electric, non-plug-in hybrid	0
Plug-in hybrid	0
100 percent electric	7
Fueled with compressed natural gas (CNG)	0
Hydrogen fueled	0
Fueled with B20 or higher biofuel for more than 4 months of the year	0
Fueled with locally produced, low-level (e.g. B5) biofuel for more than 4 months of the year	112

A brief description of the institution's efforts to support alternative fuel and power technology in its motorized fleet:

The Campus Fleet Manager, Bill Watts works to reduce campus fleet, replace with alternative fueled vehicles, increase campus fleet mileage efficiency, and install electric vehicle charging stations on campus, of which we currently have 5, including the states first Level III Charger.

The website URL where information about the institution's support for alternative fuel and power technology is available:

Student Commute Modal Split

Responsible Party

Robert Hendry
Commuter Options Coordinator
Parking 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.

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

Total percentage of students that use more sustainable commuting options:

67

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)	33
Walk, bicycle, or use other non-motorized means	14
Vanpool or carpool	9
Take a campus shuttle or public transportation	36
Use a motorcycle, scooter or moped	2

A brief description of the method(s) used to gather data about student commuting:

Online questionnaire

The website URL where information about sustainable transportation for students is available:

[STARS Reporting Tool | AASHE](#)

Employee Commute Modal Split

Responsible Party

Robert Hendry

Commuter Options Coordinator
Parking 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.

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

Total percentage of the institution's employees that use more sustainable commuting options:

29

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)	71
Walk, bicycle, or use other non-motorized means	8
Vanpool or carpool	10
Take a campus shuttle or public transportation	6
Use a motorcycle, scooter or moped	2
Telecommute for 50 percent or more of their regular work hours	---

A brief description of the method(s) used to gather data about employee commuting:

Questionnaire

The website URL where information about sustainable transportation for employees is available:

<http://parking.umass.edu/index.php/generalinfo/commuteroptionsprogram/>

Support for Sustainable Transportation

Responsible Party

Ezra Small
Sustainability Manager
Physical Plant

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

"---" 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:

Bicycles can be housed securely within many of the dorms or buildings on campus. There is also a student run business, the Bike Co-Op, for bike repair on campus.

We provide many showers at UMass Amherst, and there are locker facilities in our gym. Green Building Researchers have mapped out every bike storage facility (bike racks, bike lockers, etc) and all of the available showers for bike commuters on the interactive Campus Sustainability Explorer available on the Sustainable UMass website.

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:

UMass Amherst has bike loops everywhere and continues to install more loops each year. In 2014 the Sustainable UMass office sent out a bicycle loop survey to ask students where the new bicycle loops should be placed. There is a bike loop layer (which may be slightly outdated) on our Sustainability Explorer interactive map here:

<http://maps.umass.edu/apps/sustainability/cse/>

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:

Complete Streets and Pedestrian spine plans are being implemented through the Campus Master Plan here:

<http://www.umass.edu/cp/MPFinal.pdf>

. See page 105 for pedestrain spine map, and page 111 for "Think Pedestrian First" mention of complete streets, bicycle and transit accomodation along roads.

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:

UMass Student Government started the UMass Amherst Bike Share Program in Spring 2011. Students, faculty, and staff can check out bikes for their use from the Student Government Office from March-November.

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?:

No

A brief description of the certification, including date certified and level:

UMass Amherst is a "honorable mention" campus.

<http://www.umass.edu/sustainability/green-campus/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):

For students and faculty the PVRTA Bus system is free during the school year. The on campus shuttles remain free all year to students and faculty.

Does the institution offer a guaranteed return trip (GRT) program to regular users of alternative modes of transportation?:

No

A brief description of the GRT program:

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:

The UMass Rideshare Program provides an alternative to single occupancy vehicles by assisting UMass employees and off-campus students in forming carpools. The goals of the UMass Rideshare Program are to reduce commuter traffic on campus, improve the environment and air quality of the region, and offer an alternative to full-cost UMass parking permits.

Rideshare services are offered free of charge to any employee or off-campus student on the Amherst campus. Services offered include carpool matching, Guaranteed Ride Home, and commuter information on transit services and park and ride lots.

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:

UMass Amherst has ZipCar:

<http://www.zipcar.com/umass>

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:

UMass Amherst has the first Level III charging station in the state of Massachusetts at the transit center. It has 6 total Level II charging stations across campus.

<http://www.umass.edu/sustainability/green-campus/electric-vehicles-and-charging-stations>

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:

The University recognizes that in order to attract, retain, and develop highly skilled employees and partner with the Union on promoting a clean environment, there may be times when it is in the best interest of both the University and the employee to consider options beyond traditional work locations and schedules. This flexibility must always meet the needs of the individual campus business units. The University's commitment to this flexibility does not mean that every employee is entitled to a flexible work option. The nature of the STARS Reporting Tool | AASHE

work and/or the needs of the University may preclude a flexible work arrangement. Flexibility is appropriate where both the needs of the University and the needs of the employee are met.

Upon request of a bargaining unit member, the supervisor may grant, for a specific period of time, or for an unspecified time (subject to a cancellation by the supervisor) a flexible personal work schedule, a compressed work week, or an alternative work site/telecommuting schedule, so long as the bargaining unit member can demonstrate to the satisfaction of the supervisor that the proposed schedule will not interfere with or detract from the delivery of services provided or the day to day operation of the department. Such request shall not be unreasonably denied.

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:

The University recognizes that in order to attract, retain, and develop highly skilled employees and partner with the Union on promoting a clean environment, there may be times when it is in the best interest of both the University and the employee to consider options beyond traditional work locations and schedules. This flexibility must always meet the needs of the individual campus business units. The University's commitment to this flexibility does not mean that every employee is entitled to a flexible work option. The nature of the work and/or the needs of the University may preclude a flexible work arrangement. Flexibility is appropriate where both the needs of the University and the needs of the employee are met.

Upon request of a bargaining unit member, the supervisor may grant, for a specific period of time, or for an unspecified time (subject to a cancellation by the supervisor) a flexible personal work schedule, a compressed work week, or an alternative work site/telecommuting schedule, so long as the bargaining unit member can demonstrate to the satisfaction of the supervisor that the proposed schedule will not interfere with or detract from the delivery of services provided or the day to day operation of the department. Such request shall not be unreasonably denied.

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:

UMass Transit operates PVRTA buses within a 10-mile radius of campus for the towns of Amherst, Belchertown, Deerfield, Granby, Hadley, Northampton, South Hadley, and Sunderland. These bus routes are fare-free for staff and faculty.

Does the institution have other incentives or programs to encourage more sustainable modes of transportation and reduce the impact of student and employee commuting?:

No

A brief description of other sustainable transportation initiatives and programs:

The website URL where information about the institution's sustainable transportation program(s) is available:

<http://www.umass.edu/sustainability/green-campus/transportation>

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

Ezra Small
Sustainability Manager
Physical Plant

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*.

Submission Note:

Waste generated for baseline year is averages of 2011-2013 solid waste report data.

Baseline data for weighted campus users is from UMass OIR at a glance report for academic year 2011-2012.

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

Waste generated::

	Performance Year	Baseline Year
Materials recycled	2,270 Tons	2,357 Tons
Materials composted	1,726 Tons	1,463 Tons
Materials reused, donated or re-sold	10 Tons	0 Tons

Materials disposed in a solid waste landfill or incinerator	2,980 <i>Tons</i>	2,975 <i>Tons</i>
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Figures needed to determine "Weighted Campus Users"::

	Performance Year	Baseline Year
Number of residential students	13,086	12,420
Number of residential employees	0	0
Number of in-patient hospital beds	0	0
Full-time equivalent enrollment	27,106.90	26,693.80
Full-time equivalent of employees	6,271.10	6,254.40
Full-time equivalent of distance education students	798	612

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

	Start Date	End Date
Performance Year	July 1, 2013	July 1, 2014
Baseline Year	July 1, 2010	July 1, 2013

A brief description of when and why the waste generation baseline was adopted:

Our easily accessible solid waste report data dates back to FY2011. FY14 is the most recent year of record and the first year that we instituted a successful reuse program during move-in and move-out, so it is appropriate to set the FY11-FY13 time period as the baseline moving forward.

A brief description of any (non-food) waste audits employed by the institution:

Each year the Eco-Rep Program does a waste sort of residence halls in the fall. More info here:

<http://www.umass.edu/newsoffice/article/sustainability-%E2%80%98trash-sort%E2%80%99-nov-4-remin>
ds

The Office of Waste Management just did an internal waste audit to determine that percentage of trash contamination in the single-stream recycling and the percentage of recycling items in the trash bins for residence halls and classroom buildings.

A brief description of any institutional procurement policies designed to prevent waste:

A brief description of any surplus department or formal office supplies exchange program that facilitates reuse of materials:

UMass Amherst has the Surplus Barn that falls under the jurisdiction of the Office of Waste Management on campus. UMass offices can go to the barn and pick up furniture such as desks, chairs, tables, and filing cabinets. Offices that have furniture that they no longer want can send it to the barn so it can be reused.

A brief description of the institution's efforts to make materials available online by default rather than printing them:

UMass Amherst has its course catalogue online (SPIRE) where students can sign up for classes. The website provides students with their schedule as well as other important information such as their bill and major requirements. The University does not print a course catalog.

UMass also has People Finder attached to our main website to locate faculty and students so that they may be contacted. It is the campus directory.

A brief description of any limits on paper and ink consumption employed by the institution:

Students only receive a credit of five dollars on their student card for free printing. After that five dollars students must pay for their own printing.

A brief description of any programs employed by the institution to reduce residence hall move-in/move-out waste:

UMass Amherst partners with the Post Landfill Action Network (PLAN) to implement an annual Reuse Collection and Tag Sale called New2U. More info here:

<http://www.umass.edu/sustainability/green-campus/new2u-reuse-collection-and-tag-sale>

Since 2007, waste generated during move-out has been reduced from 404 tons to 293.

A brief description of any other (non-food) waste minimization strategies employed by the institution:

A brief description of any food waste audits employed by the institution:

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:

A brief description of programs and/or practices to track and reduce post-consumer food waste:

Trays are not available to use in any of the UMass Amherst Dining Halls. The trays were removed in 2009 and have not returned. Students have accepted the trayless dining very well.

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):

While we do not offer a reusable to-go container program, we do distribute reusable water bottles and to-go bags to students, as well as sell reusable coffee mugs. Students who bring reusable coffee mugs to retail dining locations and cafes also receive a discount.

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):

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:

People's Market offers mugs with the market's tree logo printed on the side in white. You get a free coffee with purchase, and refills are discounted. Other mugs are also eligible for the discount at all retail dining locations and cafes on campus.

A brief description of other dining services waste minimization programs and initiatives:

The website URL where information about the institution's waste minimization initiatives is available:

<http://www.umass.edu/recycle>

Waste Diversion

Responsible Party

Ezra Small
Sustainability Manager
Physical Plant

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*.

Submission Note:

Materials recycled and materials disposed in landfill data reported is available online each year in the Physical Plant's Office of Waste Management FY Waste Report online at the Physical Plant website:

<http://www.umass.edu/physicalplant/resources/index.html>

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

Materials diverted from the solid waste landfill or incinerator:

4,006 Tons

Materials disposed in a solid waste landfill or incinerator :

2,980 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:

In 2012, UMass Amherst launched a new single stream recycling program for most of the campus aimed at increasing recycling rates in the residence halls and in classroom buildings. UMass Amherst has one of the highest recycling rates in the state of Massachusetts when compared to other communities, ranking in the top 5% with a 56% diversion rate in FY12. The Campus Sustainability Initiative in partnership with Auxiliary Services and Physical Plant continues to implement new programs to divert solid waste from landfills or incineration, including a new composting program in most of the retail dining locations, which has helped made food waste the largest stream of recycled materials on campus at over 1,000 tons per year. Large events are now recycling and composting all materials, including the College of Natural Sciences College Day annual event which last year composted almost 100% of all the waste at the event, and accommodated over 2,000 attendees.

It is the obligation of every member of the campus community to do their part by helping the University increase its recycling rate and reduce waste - including unnecessary fines and disposal fees. University faculty, students, and staff are expected to cooperate with this program by separating recyclable materials from trash and sorting these materials into our color-coded recycling bins. The Physical Plant's Office of Waste Management will continue to support this effort by issuing recycling guidelines and providing up-to-date information and assistance to the campus community.

In 2014, UMass partnered with The Post-Landfill Action Network to organize the first ever UMass Amherst Reuse Tag Sale on campus. Over 10 tons of items were diverted from the waste stream to a reuse bin during spring sustainable move-out, stored, cleaned, and tagged during the summer by students and sold in the fall during first week. These efforts will hopefully add to the tonnage of waste diverted from landfill or incinerator.

A brief description of any food donation programs employed by the institution:

We recently began donated left over food to the UMass Chapter of the “Food Recovery Network”

<http://www.foodrecoverynetwork.org/>

A brief description of any pre-consumer food waste composting program employed by the institution:

All of our pre-consumer food waste is transported to a nearby farm for composting.

A brief description of any post-consumer food waste composting program employed by the institution:

100% of postconsumer waste is composted in our Dining Commons and conferences are composted; our largest retail dining locations provide compost bins for food waste. We offer compostable to-go plates, cups, containers, and flatware.

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	No

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:

Construction and Demolition Waste Diversion

Responsible Party

Ezra Small
Sustainability Manager
Physical Plant

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.

Submission Note:

Updated 2013 data is based on 4 reporting new construction/major renovation projects:

Goessmann Lab Renovation (147 diverted, 15 residual)

Life Science Laboratories (LSL) (795 diverted, 199 residual)

New Academic Classroom Building (NACB) (95 diverted, 22 residual)

CNS Greenhouse (67 diverted, 21 residual)

The UMass has little jurisdiction over the generation and management of construction and demolition wastes on the Amherst campus. UMass contractors are responsible under their contract with the university to recycle 75% or more of the weighted material generated by the work. Exact numbers are not known due to the amount of construction and the amount of contractors at the university. The sole exception is a small quantity of waste materials generated by the Alterations Dept. which handles minor renovations. Alterations Dept. wastes are delivered to the UMass Waste Recovery and Transfer Facility and are subject to our sorting requirements. Brick and concrete are sorted for recycling. All types of scrap wood are collected and sent for energy recovery at regional waste-to-energy plants. All metals are recycled as well.

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

Construction and demolition materials recycled, donated, or otherwise recovered:

1,104 Tons

Construction and demolition materials landfilled or incinerated :

257 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:

At UMass Amherst, the bulk of building material waste is generated by larger building projects which have been awarded to outside contractors. In these projects the outside contractors are responsible for the disposal of all construction and demolition material.

The UMass Green Building Guidelines state:

Construction Waste Management

Recycling is a high priority on campus. However, waste produced by construction activities is not sorted on campus, rather, it is the responsibility of the contractor to properly dispose of construction and demo waste.

It is the University's position that, due to the location of the campus and the availability of local waste contractors who can recycle and track construction waste, a minimum target of 75% should be met by all project teams.

We estimate that for every 1,000 tons of construction waste generated, our contractors are recycling, donating, or otherwise recovering 75% of it, i.e. 750 tons. WE estimate that 10% of construction waste is dealt with internally (i.e. not by outside contractor who are accountable to the terms of the contract they sign with us). Assuming, conservatively, that only 30% of our internal construction waste is dealt appropriately, the total tonnage % is 30 and the amount landfilled or incinerated is 70.

Hazardous Waste Management

Responsible Party

Ezra Small
Sustainability Manager
Physical Plant

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.

"---" 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:

The Chemical inventory system called CEMS (chemical environmental management system) is a reuse and exchange program to reduce the amount of hazardous, universal, and non-regulated chemical waste.

A universal waste-bulb crusher is used in the Waste Recovery Transfer Station, which extracts the mercury out of fluorescent bulbs.

A brief description of how the institution safely disposes of hazardous, universal, and non-regulated chemical waste:

The university complies with established regulations from the Mass Department Environmental Protection, MDEP (310cmr30), as well as regulations from the EPA (40cfr260, 40cfr262, 40cfr273)

The university has on site hazardous waste contractor (TSDF) who picks up and will either bulk or lab pack laboratory chemicals

A brief description of any significant hazardous material release incidents during the previous three years, including volume, impact and response/remediation:

The only reported hazardous material release incidents during the past three years have been construction related gas line leaks which were handled by EH&S, Utilities, and construction contractors.

A brief description of any inventory system employed by the institution to facilitate the reuse or redistribution of laboratory chemicals:

CEMS a web based program is used to barcode and inventory chemicals for reuse and exchange.

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):

Faculty and staff can contact the Office of Waste Management by phone or email to have electronic waste picked up and disposed of. Some collection points are present in offices throughout campus to collect smaller types of electronic waste.

A brief description of steps taken to ensure that e-waste is recycled responsibly, workers' basic safety is protected, and environmental standards are met:

All students, faculty and staff can call the office of Waste Management or go to the recycling facility to drop off and dispose of electronic waste.

All computers and electronic products on campus are barcoded and registered with the Office of Information and Technology. If the item can not be reused or refurbished the Office of Waste Management is contacted.

The Office of Waste Management contracts with RMG Enterprise Inc. from New Hampshire to dispose of the electronic waste in a safe and professional way.

The website URL where information about the institution's hazardous and electronic-waste recycling programs is available:

<http://www.ehs.umass.edu/>

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

Ezra Small
Sustainability Manager
Physical Plant

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.

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

Level of water risk for the institution's main campus:

Low to Medium

Total water use::

	Performance Year	Baseline Year
Total water use	285,506,738 Gallons	382,024,168 Gallons

Potable water use::

	Performance Year	Baseline Year
Potable water use	285,506,738 Gallons	382,024,168 Gallons

Figures needed to determine "Weighted Campus Users"::

	Performance Year	Baseline Year
--	------------------	---------------

Number of residential students	13,086	11,539
Number of residential employees	0	0
Number of in-patient hospital beds	0	0
Full-time equivalent enrollment	27,106.90	22,957
Full-time equivalent of employees	6,271.10	5,838
Full-time equivalent of distance education students	798	388

Gross floor area of building space::

	Performance Year	Baseline Year
Gross floor area	12,239,033 <i>Square Feet</i>	9,989,626 <i>Square Feet</i>

Area of vegetated grounds::

	Performance Year	Baseline Year
Vegetated grounds	1,317.50 <i>Acres</i>	1,350 <i>Acres</i>

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

	Start Date	End Date
Performance Year	July 1, 2013	July 1, 2014
Baseline Year	July 1, 2004	July 1, 2005

A brief description of when and why the water use baseline was adopted:

UMass Amherst has always used 2005 as our baseline for benchmarking water usage in STARS.

Water recycled/reused on campus, performance year:

51,000,000 *Gallons*

Recycled/reused water withdrawn from off-campus sources, performance year:

A brief description of any water recovery and reuse systems employed by the institution:

The Central Heating Plant (CHP) currently utilizes the effluent from the Amherst Waste Water Treatment Plant (reclaimed water) as boiler make-up water to produce steam for the campus. To increase water conservation, the CHP has received a Class A Reclaimed Water Application to the Massachusetts Department of Environmental Protection to use reclaimed water at the CHP cooling towers as well, the first issued in Western Massachusetts.

The Amherst campus currently uses about 330 million gallons of water per year. With the Class A Permit, the CHP would be able to use up to 200,000 gallons per day of reclaimed water, resulting in a potential reduction of potable water consumption of 21%.

History: Approximately ten years ago the Town of Amherst Department of Public Utilities requested that UMass investigate ways to reuse the town's Waste Water Treatment Plant's effluent (reclaimed water) on campus. UMass commissioned a study to investigate the feasibility of reusing this effluent and confirmed that the reclaimed water was possible for boiler water make-up at the old power plant. The best path forward on this effort was to use proven technology – multi media filters, reverse osmosis membranes, and chlorination.

With approval from the Town of Amherst and the Massachusetts Department of Environmental Protection the University started utilizing reclaimed water in 2005. The water re-use initiative reduced potable water consumption by about 16%.

A brief description of any water metering and management systems employed by the institution:

All buildings over 20,000 square feet are metered here on campus.

A brief description of any building retrofit practices employed by the institution, e.g. to install high efficiency plumbing fixtures and fittings:

The retrofit of campus toilets, urinals, and faucets targeted both academic buildings and residence halls. Some 3,400 toilets, 771 urinals, and 4,200 faucets have undergone retrofitting. Piping was also modified to comply with standard trade practices.

The flush valves on urinals were replaced with flushometer valves, reducing water consumption from 1.5 to 1.0 gallons of water per flush. Lastly, the faucets include tamper resistant flow restrictors and adapters. The total water savings for all retrofits, including toilets, urinals, showers, faucets, and water heating, will average about 10.5 million cubic feet of water annually, with associated cost savings of about \$400,000.

The Orchard Hill Sustainable/Low-Flow Showerhead project is supported by the Sustainability, Innovation & Engagement Fund and was proposed by an Eco-Rep student living in Orchard Hill. The program replaced all 192 showerheads in Orchard Hill bathrooms during the summer of 2014. The project will save an estimated 1 million gallons of water per year.

A brief description of any policies or programs employed by the institution to replace appliances, equipment and systems with water-efficient alternatives:

Water efficiency projects are incorporated into the E+ Program each year. s millions of dollars for energy conservation projects, which upgrade or replace inefficient physical structures or technologies on campus. The program is designed as an eventual payback system, where the annual savings that the project creates actually pays for the initial cost of the project within seven years. After the initial

payback period, the projects will continue to reduce utilities costs.

A brief description of any water-efficient landscape design practices employed by the institution (e.g. xeriscaping):

The plants are planted and watered for a year. The plants that are selected grow naturally in the local environment so after the first year plants are not watered and are allowed to survive on their own.

A brief description of any weather-informed irrigation technologies employed by the institution:

A brief description of other water conservation and efficiency strategies employed by the institution:

The website URL where information about the institution's water conservation and efficiency initiatives is available:

<http://www.mass.gov/governor/legislationeexecorder/executiveorder/executive-order-no-484.html>

Rainwater Management

Responsible Party

Ezra Small
Sustainability Manager
Physical Plant

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.

"---" 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:

The university has decided to incorporate rain gardens and vegetated swales in all new construction to reduce stormwater run off. The university has decided to implement the same technology for existing stormwater issues.

All new construction meets LEED for New Construction v3 stormwater management requirements such as Stormwater Design - Quality Control and Water Efficient Landscaping - No Potable Water Use or Irrigation.

Also to note: A team of students, faculty, and staff have initiated the Tan Brook Project, an initiative to raise awareness about the Tan Brook Watershed which runs underground across the campus and into the Campus Pond. This project has received campus wide support from administrators from Physical Plant and Facilities and Campus Planning and has become a platform for discussing future stormwater retention in centralized locations to resolve stormwater impacts of new construction projects.

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:

All new construction and major renovations are LEED Silver minimum and use the UMass Green Building Guidelines for deciding which credits to pursue for each project. The current guidelines for the campus (revised in 2013 and being updated currently for LEED v4 to be released in 2015) has set medium to high priority levels for all related water credits, and can be found here:

<http://www.umass.edu/fp/gbGuidelines.pdf>

Strategies include rain gardens, water efficient landscaping, innovative wastewater technologies like water catchment tanks for flushing, and permeable pavement.

A brief description of any rainwater harvesting employed by the institution:

At the \$102M Integrated Science Building, a 20,000 gallon storage tank collects rain water on the roof to reduce discharge to the campus sewer system, and instead it is recycled by the chiller plant. Effluent water piped from the Amherst water treatment plant is used to supplement water lost to evaporation.

<http://www.umass.edu/sustainability/green-campus/integrated-sciences-building>

Rainwater harvested directly and stored/used by the institution, performance year:

A brief description of any rainwater filtering systems employed by the institution to treat water prior to release:

A brief description of any living or vegetated roofs on campus:

The new Integrated Learning Classroom (ILC) (formerly called the NACB) is the first building on campus to be built with a new vegetated roof:

A brief description of any porous (i.e. permeable) paving employed by the institution:

There are three examples of porous paving applications on campus: The Robsham Visitor Center, the Southwest Residential Area Concourse, and the Stockbridge School of Agriculture.

A brief description of any downspout disconnection employed by the institution:

A brief description of any rain gardens on campus:

The Lot 62 Rain Garden was construction alongside the Studio Arts Building and has been very successful in slowing down rainwater.

A brief description of any stormwater retention and/or detention ponds employed by the institution:

Central heating plant has retention ponds as well as the Southwest Concourse at the University.

A brief description of any bioswales on campus (vegetated, compost or stone):

The university has vegetated stone swales. They are visible across campus and in new construction project, specifically in the Southwest Concourse project on campus.

A brief description of any other rainwater management technologies or strategies employed by the institution:

The Integrated Science Building (ISB) on campus has storm-water recycling that supplies the cooling tower.

The website URL where information about the institution's rainwater management initiatives, plan or policy is available:

<http://www.umass.edu/fp/projectmanagement/constructioninformation/>

Wastewater Management

Responsible Party

Ezra Small
Sustainability Manager
Physical Plant

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*.

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

Total wastewater discharged:

48,716,350 Gallons

Wastewater naturally handled:

0 Gallons

A brief description of the natural wastewater systems used to handle the institution's wastewater:

The University does not currently use natural wastewater systems to handle wastewater.

The website URL where information about the institution's wastewater management practices is available:

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

Ezra Small

Sustainability Manager

Physical Plant

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:

Publishing of the Climate Action Plan (2010) and update of the Climate Action Plan v2.0 (2012). Establishment of the Sustainability, Innovation, & Engagement Fund and awarding of first phase of 7 sustainability projects which have been implemented across the campus.

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:

The Chancellor's Sustainability Committee (formerly EPAC) helps to assess ways to reduce environmental impacts of the campus in a manner which incorporates sound business practices. One of the Committee goals is to enhance the campus' ability to gather, track, and analyze environmental performance data and related information and develop report documents.

Another goal is to devise a comprehensive and common-sense way to foster environmental stewardship across the entire organization among and within campus departments, both operational and academic. The Committee advises the Chancellor Leadership Committee

(CLC) on all matters related to campus environmental performance including adjustments to operating policies and/or practices. The Committee helped create the UMass climate action plan that will aim for carbon neutrality by 2050.

Members of each committee, including affiliations and role (e.g. staff, student, or faculty):

In 2012 EPAC was renamed and restructured to better serve the campus community and achieve the mission and goals.

The Chancellors Sustainability Committee now consists of three tiers: Sub-Committees (meet monthly), Implementation Team (meets monthly), and Executive Team (meets quarterly).

There are currently 4 active Sub-Committees:

Education and Research

Finance

Green Building

Master Planning

The Implementation Team consists of sustainability professionals plus staff/faculty who do sustainability work or teach about sustainability related or focused topics on campus or are passionate about sustainability.

Ezra Small (Chair)

Campus Sustainability Manager

Sustainability Communications & Marketing Manager (Co-Chair, Currently empty)

Sustainability Communications & Marketing Manager, University Relations

Craig Nicolson (Co-Chair)

Director of Academic Sustainability Programs, Professor in Dept of Environmental Conservation

Rachel Dutton (Co-Chair)

Sustainability Manager for Auxiliary Services

Cynthia Barstow

Professor, Isenberg School of Management

Robert Ryan

Professor, Landscape Architecture and Regional Planning

Lynn McKenna

Assistant Budget Director, Budget Office

Ted Mendoza

Capital Project Manager, Facilities Planning Division

Ludmilla Pavlova

Senior Campus Planner, Campus Planning

Rob Hendry

Rideshare Coordinator, Parking Services

Executive Team Members:

Juanita Holler
Associate Vice Chancellor, Facilities & Campus Services

Andy Mangels
Associate Vice Chancellor for Finance and Budget Director

Ray Jackson
Director, Physical Plant

Eddie Hull
Executive Director, Residence Life

Ken Toong
Executive Director of Auxiliary Enterprises

Michael Grabscheid
Executive Director of Marketing & New Business Development, University Relations

Steve Goodwin
Dean of the College of Natural Sciences

Dennis Swinford
Director of Campus Planning, Campus Planning

Tom Shaw
Interim Director of Design/Construction Mgt

Christine McCormick
Dean of the School of Education

Cheryl L. Dukes
Associate Director of Government Relations, Office of Research Development

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

<http://www.umass.edu/sustainability/get-involved/chancellors-sustainability-committee>

Does the institution have at least one sustainability office that includes more than 1 full-time equivalent (FTE) employee?:

No

A brief description of each sustainability office:

Full-time equivalent (FTE) of people employed in the sustainability office(s):

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

Does the institution have at least one sustainability officer?:

Yes

Name and title of each sustainability officer:

Ezra Small

A brief description of each sustainability officer position:

Our campus hired its first sustainability coordinator in 2009. In addition to the current Campus Sustainability Manager, we also have a new Sustainability Communications Manager (hired in 2013) and a number of full-time sustainability staff who work with Auxiliary Services.

The Campus Sustainability Manager (CSM) was hired in 2011, directs the main Sustainable UMass student initiatives on campus and oversees and coordinates all operational aspects of campus sustainability (from developing new clean energy sources to increasing recycling rates to participating in LEED teams for new construction, to establishing a Green Revolving Fund etc). The CSM works closely with the Sustainability Communications Manager and other campus staff and faculty on all sustainability-related projects and programs throughout the university.

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

<http://www.umass.edu/sustainability/about/triple-bottom-line>

Responsible Party

Ezra Small
Sustainability Manager
Physical Plant

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	No	No
Air and Climate	Yes	Yes
Buildings	Yes	Yes
Dining Services/Food	Yes	Yes
Energy	Yes	Yes
Grounds	Yes	Yes
Purchasing	No	No
Transportation	Yes	Yes
Waste	Yes	Yes
Water	Yes	Yes
Diversity and Affordability	Yes	Yes
Health, Wellbeing and Work	No	No
Investment	Yes	Yes

A brief description of the plan(s) to advance sustainability in Curriculum:

Plans include:

Creation of a School for Sustainability and the Environment

Creation of an undergraduate Sustainability Major

General Education Sustainability Requirement

Securing future funding for the Sustainability Curriculum Initiative, currently funded by the UMass Libraries Sustainability Fund

Extend sustainability learning outcome requirements to a majority of majors and degrees.

Offer more sustainability focused and related academic courses.

Conduct assessments of sustainability literacy of all students focusing on knowledge of topics, not values or beliefs

The measurable objectives, strategies and timeframes included in the Curriculum plan(s):

Plans include:

Creation of a School for Sustainability and the Environment

Creation of an undergraduate Sustainability Major

General Education Sustainability Requirement

Metrics for extending learning outcomes:

2011: 14% of students

2015: 30% goal

2020: 50-60% goal

Metrics for more sustainability focused and related courses:

2011: 2%

2015: 4%

2020: 6%

Accountable parties, offices or departments for the Curriculum plan(s):

Craig Nicolson, Director of Sustainability Academic Programs, Faculty in Environmental Conservation

Steven Goodwin, Dean of College of Natural Resources

Madeleine Charney, Sustainability Librarian

Curt Griffin, Department Head for Environmental Conservation

A brief description of the plan(s) to advance sustainability in Research (or other scholarship):

These plans can be found in the Climate Action Plan v2.0 (2012).

The measurable objectives, strategies and timeframes included in the Research plan(s):

Place a spotlight on research that is contributing to a just and sustainable future;
begin tracking the financial commitment to sustainability related research to highlight how it can potentially offset campus emissions.

Accountable parties, offices or departments for the Research plan(s):

University Relations, Communications and Marketing Manager (position currently empty)
Office of Research & Engagement, Vice Chancellor Mike Malone

A brief description of the plan(s) to advance Campus Engagement around sustainability:

These plans can be found in the Climate Action Plan v2.0 (2012).

Increase student engagement in residence halls and campus activities and increase
faculty and staff engagement in classroom and administrative offices

Renew the ACUPCC: Reaffirm leadership and recommit the University to the goals within
the commitment text

Restructure and grow EPAC to include members from University Relations, Budget office, Student Affairs and Residence Life, Diversity
Office, Alumni & Development, and Athletics

The measurable objectives, strategies and timeframes included in the Campus Engagement plan:

Grow Eco Reps from 35-40 to 75-100 members

Grow Green Games to 1 Eco Leader/Res Hall

Grow Green Office Program to every office at least Bronze certified

Accountable parties, offices or departments for the Campus Engagement plan(s):

Ezra Small, Campus Sustainability Manager

Dawn Bond, Student Affairs/Residential Life

Eddie Hull, Student Affairs

Enku Gelaye, Vice Chancellor of Student Affairs

A brief description of the plan(s) to advance Public Engagement around sustainability:

The measurable objectives, strategies and timeframes included in the Public Engagement plan(s):

Accountable parties, offices or departments for the Public Engagement plan(s):

A brief description of the plan(s) to advance sustainability in Air and Climate:

From the Climate Action Plan 2.0:

Develop campus wide sustainable development policy for carbon neutral growth, which recovers the costs of greening new and existing buildings through energy efficiency measures.

Set more achievable and clearer emission reduction goals for 2020, 2025, 2035

The measurable objectives, strategies and timeframes included in the Air and Climate plan(s):

2013: Policy drafted

2014: Policy adopted

2015: Footprint of new construction and major renovations offset by energy efficiency and renewable energy

Accountable parties, offices or departments for the Air and Climate plan(s):

Ezra Small, Campus Sustainability Manager, Physical Plant

Ray Jackson, Physical Plant Director

A brief description of the plan(s) to advance sustainability in Buildings:

Continuous commission existing buildings across campus to improve energy efficiency, yield an average of 16% energy costs per building, reduce energy usage and emissions 10-25% by 2020.

Develop a plan for certifying buildings LEED for Existing Buildings (EBOM) under LEED v4

The measurable objectives, strategies and timeframes included in the Buildings plan(s):

2012: 2 Buildings

2012-2017: 5 Buildings per year, Grow CCx program campus wide, 15% reductions

2020: Continue to CCx buildings campus wide for additional 10% or more reductions

The Green Building Committee is developing Green Building Guidelines for LEED v4.

Accountable parties, offices or departments for the Buildings plan(s):

Ted Mendoza, Design & Construction Management, Green Building Committee Chair

Green Building Researchers in Campus Planning (4)

Ludmilla Pavlova, Senior Facilities Planner, Campus LEED Contact

Ezra Small, Campus Sustainability Manager, Physical Plant

Ray Jackson, Director of Physical Plant

Juanita Holler, Associate Vice Chancellor, Facilities and Campus Services

Jim Sheehan, Vice Chancellor for Administration and Finance

A brief description of the plan(s) to advance sustainability in Dining Services/Food:

The Auxiliary Services Sustainability office has developed an action plan for dining sustainability which includes meeting Real Food Challenge Goals for 2020, purchasing, waste reduction, food recovery, growing the student farmers market, expanding UMass Permaculture, making the Dining Commons on campus the most sustainable dining commons in the country, and building and supporting a healthy, sustainable, regional food system.

The measurable objectives, strategies and timeframes included in the Dining Services/Food plan(s):

Our recently completed baseline assessment has shown that UMass Dining is currently sourcing about 7% Real Food. We are undergoing plans to achieve 20% by 2020, according to the Real Food Campus Commitment.

Accountable parties, offices or departments for the Dining Services/Food plan(s):

Rachel Dutton, Auxiliary Services Sustainability Manager

Ken Toong, Executive Director of Auxiliary Enterprises

A brief description of the plan(s) to advance sustainability in Energy:

From Climate Action Plan 2.0:

Develop a campus renewable energy plan to produce electricity from 30% renewable energy sources by 2020 (EO484), ultimately reducing campus emissions by 25-30%.

Develop a Reduce Your Use Campaign, including the piloting of innovative energy management technologies, reductions in individual energy consumption through student energy competitions and green office programs, reducing energy usage and campus emissions 5-10% by 2020.

Preserve the E+ Energy Efficiency Program by continuing to improve the project selection process and ultimately the effectiveness of the program.

From the Solar Energy Plan:

Develop new on-site solar energy projects on the main campus

The measurable objectives, strategies and timeframes included in the Energy plan(s):

2012: Increased visibility of cost savings of projects

2013: National recognition for program

2015: Continuation of projects implemented and cost savings from projects

Complete installation of first solar parking lot canopy at Visitor Center by end of 2015 (300 kW)

Complete Power Purchasing Agreement for campus wide solar projects by mid-2015, go out to bid for PPA installations (2-3 MW)

Accountable parties, offices or departments for the Energy plan(s):

Ray Jackson, Director Physical Plant
Jason Burbank, Energy Engineer
Ezra Small, Campus Sustainability Manager
Juanita Holler, Associate Vice Chancellor, Facilities and Campus Services
Jim Sheehan, Vice Chancellor for Administration and Finance
Andy Mangels, Budget Office

A brief description of the plan(s) to advance sustainability in Grounds:

Grounds has plans to increase Integrated Pest Management Program and implement more stormwater management strategies such as more rain gardens, permeable pavement, etc.

The measurable objectives, strategies and timeframes included in the Grounds plan(s):

Implement past designs for the West Gate storm basin near the soccer fields with a integrative stormwater design approach that will help solve flooding/erosion.

Accountable parties, offices or departments for the Grounds plan(s):

Pam Monn, Assistant Director of Grounds
Gary Glazier, Landscape Services Manager

A brief description of the plan(s) to advance sustainability in Purchasing:

Plans to advance sustainability in purchasing will be mostly at the UMass System level. It will focus on recycled paper content purchasing, reducing paper use and waste, etc.

The measurable objectives, strategies and timeframes included in the Purchasing plan(s):

The Director of Procurement for UMass System will continue working with each of the UMass campus Procurement Directors and our vendor Office Max to reduce paper usage and ordering and create a policy that will require a 30% recycled/post consumer paper or greater across all campuses.

Accountable parties, offices or departments for the Purchasing plan(s):

John Healy, UMass Procurement
John Martin, Director of UMass Amherst Procurement
Ezra Small, Campus Sustainability Manager

A brief description of the plan(s) to advance sustainability in Transportation:

Transportation Services Fleet Manager works daily to reduce the campus fleet, increase alternative vehicles and fuel efficiency of campus fleet, increase car sharing and pooling, reducing single occupancy vehicles, and increasing electric vehicle charging stations.

The measurable objectives, strategies and timeframes included in the Transportation plan(s):

UMass currently has five electric vehicle charging stations on campus. Goals are in place to increase to at least 8 by end of 2015. Campus fleet continues to be made more efficient and newer. Plans are in place to implement CNG vehicles on campus and a CNG fueling station.

Accountable parties, offices or departments for the Transportation plan(s):

Bill Watts, Transportation Services, Fleet Manager

Jeri Baker, Director of Transportation Services

A brief description of the plan(s) to advance sustainability in Waste:

Plans and committees are in place to increase residential recycling rates, increase electronic recycling options, create new policies that mandate compliance campus-wide, and increase reuse programs during Move-Out.

The measurable objectives, strategies and timeframes included in the Waste plan(s):

Reuse: New2U Program will expand from one residential area in 2014 to 2 areas in 2015, 3 in 2016, and so on until all of Residential Life is offering reuse options to students during move-out.

Recycling Rates: Increase the 30% residential recycling rates to help achieve 60% campus wide rates by end of 2015.

Accountable parties, offices or departments for the Waste plan(s):

John Pepi, Solid Waste Manager, Office of Waste Management, Physical Plant

Pam Monn, Director of Grounds, Physical Plant

Ezra Small, Campus Sustainability Manager, Physical Plant

A brief description of the plan(s) to advance sustainability in Water:

Plans to expand reclaimed water program on campus from Central Heating Plant (currently) to building cooling towers including the Integrated Science Building tower and the Commonwealth Honors College Complex tower. Plans also exist to expand low flow showerheads throughout housing where needed.

The measurable objectives, strategies and timeframes included in the Water plan(s):

Currently, the campus uses over 50,000,000 gallons of reclaimed water. Expanding the program would increase reclaimed water by 50% and reduce potable water drastically.

Accountable parties, offices or departments for the Water plan(s):

Ray Jackson, Director of Physical Plant

A brief description of the plan(s) to advance Diversity and Affordability:

The Diversity Strategic Plan was just released in late January, 2015.

<https://www.umass.edu/chancellor/diversity-strategic-plan>

The measurable objectives, strategies and timeframes included in the Diversity and Affordability plan(s):

Can be found here:

<https://www.umass.edu/chancellor/diversity-strategic-plan>

Establish UMass Amherst as a destination of choice for students of color and other underrepresented groups.

- b. Improve the campus climate of inclusion.
- c. Enhance effectiveness of curriculum and educational programs with regard to diversity and inclusion.
- d. Increase focus on recruiting, retention, and promotion of diverse faculty and staff.
- e. Increase engagement with external communities/schools with large proportions of underrepresented minorities

Accountable parties, offices or departments for the Diversity and Affordability plan(s):

The Diversity Strategic Plan Steering Committee:

Robert Feldman (Chair), Deputy Chancellor Bryan Beck, Chancellor’s Office Jasmine Bertrand-Halidy, Student Bridges Mari Castañeda, Department of Communication Debora Ferreira, Office of Equal Opportunity & Diversity Enku Gelaye, Student Affairs Adina Giannelli, Graduate Student Senate Bryan Harvey, Chancellor’s Office Jennifer Lundquist, Department of Sociology Mzamo Mangaliso, Isenberg School Josh Odam, Student Bridges Shelly Perdomo, Student Affairs Vinayak Rao, Student Government Organization James Roche, Provost’s Office Amilcar Shabazz, Chancellor’s Office

A brief description of the plan(s) to advance sustainability in Health, Wellbeing and Work:

The measurable objectives, strategies and timeframes included in the Health, Wellbeing and Work plan(s):

Accountable parties, offices or departments for the Health, Wellbeing and Work plan(s):

A brief description of the plan(s) to advance sustainability in Investment:

The University of Massachusetts Foundation Socially Responsible Investing Advisory Committee (SRIAC) is responsible for considering divestment issues raised by students, faculty, alumni and other members of the UMass community. The eight-member Committee, which consists of faculty, administrators, alumni and students, serves as a forum in which social investment issues can be raised, discussed and reviewed. The Committee is responsible for considering proposals brought forth by members of the University community to determine whether they warrant further consideration by the Foundation's Board of Directors.

The Campus Sustainability Manager is currently working with the Associate Vice President and Controller of the UMass Foundation.

The measurable objectives, strategies and timeframes included in the Investment plan(s):

Measurable Objectives Unknown

Principles and Guidelines of Committee can be found here:

<http://www.umassp.edu/sites/umassp.edu/files/content/foundation/UMF%20SRIAC%20Principles%20and%20Guidelines.pdf>

Accountable parties, offices or departments for the Investment plan(s):

Judy Murphy, Associate VC and Controller, Foundation

David Basile, Senior Vice President/Wealth Management, Janney Montgomery Scott, Alumni Representative, Stephen Dunne, Managing Director, Private Banking North America, Credit Suisse Securities, Alumni Representative and Chair, Christine Wilda, Senior Vice President and Treasurer, UMass President's Office, Senior Administrator Representative, John Kennedy, Vice Chancellor for University Relations, UMass Amherst Senior Administrator Representative, Stephen White, Professor of Marketing and International Business, Charlton College of Business, UMass Dartmouth Faculty Representative, Sharon Cantor, Associate Professor, Department of Cancer Biology, UMass Medical School Faculty Representative, Sarah Freudson, UMass Amherst Student Representative, Nolan O'Brien, UMass Boston Student Representative

A brief description of the plan(s) to advance sustainability in other areas:

The measurable objectives, strategies and timeframes included in the other plan(s):

Accountable parties, offices or departments for the other plan(s):

The institution's definition of sustainability:

Does the institution's strategic plan or equivalent guiding document include sustainability at a high level?:

No

A brief description of how the institution's strategic plan or equivalent guiding document addresses sustainability:

The website URL where information about the institution's sustainability planning is available:

<http://scholarworks.umass.edu/csi/3/>

Responsible Party

Ezra Small

Sustainability Manager

Physical Plant

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.

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

Do 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)?:

Yes

A brief description of the mechanisms through which students have an avenue to participate in one or more governance bodies:

Student Government Association (SGA) Student Trustee, President, the Executive Cabinet, and the Student Senate made up of 50 Senators, the Speaker, the Associate Speaker, and the Special Assistants.

Is there at least one student representative on the institution's governing body who was elected by peers or appointed by a representative student body or organization?:

Yes

A brief description of student representation on the governing body, including how the representatives are selected:

The Student Trustee is elected by the student body and serves on multiple governing bodies including the Socially Responsible Investments Committee of the UMass Foundation.

Do students have a formal role in decision-making in regard to the following?:

	Yes or No
Establishing organizational mission, vision, and/or goals	Yes

Establishing new policies, programs, or initiatives	Yes
Strategic and long-term planning	Yes
Existing or prospective physical resources	Yes
Budgeting, staffing and financial planning	---
Communications processes and transparency practices	Yes
Prioritization of programs and projects	Yes

A brief description of the formal student role in regard to each area indicated, including examples from the previous three years:

The President is an undergraduate student who meets regularly with the SGA Vice-President, the Executive Cabinet, administrators, students, town officials, alumni, etc, in an effort to formulate and implement policy initiatives across campus.

The President is vested with the executive authority of the SGA as provided by the SGA Constitution and By-Laws. He/She shall act as the Chief Executive Officer of the SGA and therefore is empowered to:

Take care that all the provisions of the SGA Constitution, By-Laws, and Acts of the SGA are faithfully executed.

Appoint, upon a majority vote of the Senate membership, the Executive Cabinet.

Give direction to the SGA Vice-President and the Executive Cabinet.

Appoint, upon the recommendation of the Coordinating Council, and upon a majority vote of the Senate membership, seven Justices of the Student Judiciary.

Appoint all lesser executive officers and external SGA committees as defined by the By-laws.

Veto any bill except resolutions, the Annual SGA S-1 Budget Act, and Articles of Impeachment.

Initiate a referendum.

The Senate is responsible for:

passing resolutions and enactments

allocating the \$2 million budget

expressing the will of the undergraduate student body on campus

Senators are appointed to one of the listed standing committees:

Senators are also required to be a member of a Faculty Senate or other Administrative Committee such as SAJIC or the Police Advisory Board.

Do all staff, regardless of type or status, have an avenue to participate in one or more governance bodies (through direct participation or the election of representatives)?:

Yes

A brief description of the mechanisms through which all staff have an avenue to participate in one or more governance bodies:

Staff on campus have the ability to participate in their unions which provide opportunities for establishing new policies, programs, or initiatives; budgeting, staffing and financial planning; and communications processes and transparency practices.

Is there at least one non-supervisory staff representative on the institution’s governing body who was elected by peers or appointed by a representative staff body or organization?:

No

A brief description of non-supervisory staff representation on the governing body, including how the representatives are selected:

Do non-supervisory staff have a formal role in decision-making in regard to the following? :

	Yes or No
Establishing organizational mission, vision, and/or goals	Yes
Establishing new policies, programs, or initiatives	Yes
Strategic and long-term planning	Yes
Existing or prospective physical resources	Yes
Budgeting, staffing and financial planning	Yes
Communications processes and transparency practices	Yes
Prioritization of programs and projects	Yes

A brief description of the formal staff role in regard to each area indicated, including examples from the previous three years:

The Campus Sustainability Manager has played a large role in many of the above decision making areas at the highest campus governing level including input on the Campus Master Plan, the Master Energy Plan, Sustainability Planning, etc.

Do all faculty, regardless of type or status, have an avenue to participate in one or more governance bodies (through direct participation or the election of representatives)?:

Yes

A brief description of the mechanisms through which all faculty (including adjunct faculty) have an avenue to

participate in one or more governance bodies:

Faculty Senate

Is there at least one teaching or research faculty representative on the institution's governing body who was elected by peers or appointed by a representative faculty body or organization?:

Yes

A brief description of faculty representation on the governing body, including how the representatives are selected:

This can be found in the Faculty Senate By-laws:

http://www.umass.edu/senate/sites/default/files/bylaws_constitution/Faculty-Senate-Bylaws-and-Constitution.pdf

Do faculty have a formal role in decision-making in regard to the following?:

	Yes or No
Establishing organizational mission, vision, and/or goals	Yes
Establishing new policies, programs, or initiatives	Yes
Strategic and long-term planning	Yes
Existing or prospective physical resources	Yes
Budgeting, staffing and financial planning	Yes
Communications processes and transparency practices	Yes
Prioritization of programs and projects	Yes

A brief description of the formal faculty role in regard to each area indicated, including examples from the previous three years:

Faculty have served on the Chancellors Joint Task Force on Strategic Oversight Committee over the past 2 years.

The website URL where information about the institution's governance structure is available:

[STARS Reporting Tool | AASHE](#)

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

Responsible Party

Ezra Small
Sustainability Manager
Physical Plant

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
-

Submission Note:

In addition to the above mentioned offices/positions it should be noted that UMass Amherst also has a Faculty Advisor for Diversity & Excellence housed directly within the Chancellor's Office.

For additional details about this position
<http://www.umass.edu/chancellor/amilcar-shabazz>

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

Does the institution have 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?:

Yes

Does the committee, office and/or officer focus on one or both of the following?:

	Yes or No
Student diversity and equity	Yes
Employee diversity and equity	Yes

A brief description of the diversity and equity committee, office and/or officer, including purview and activities:

The Faculty Senate Status of Diversity Council makes recommendations on all matters affecting the status of diverse populations and underrepresented communities on the campus, including such matters as faculty, librarian and staff recruitment, retention, promotion and salaries, the recruitment, admission and retention of undergraduate and graduate minority students, granting of financial aid, and the development of programs to reflect the needs of the diverse UMass community.

The full-time equivalent of people employed in the diversity and equity office:

7

The website URL where information about the diversity and equity committee, office and/or officer is available:

<http://www.umass.edu/senate/councils/diversity.html>

Does the institution make cultural competence trainings and activities available to all members of the following groups?:

	Yes or No
Students	Yes
Staff	Yes
Faculty	---
Administrators	---

A brief description of the cultural competence trainings and activities:

1. INTERGROUP DIALOGUES

Intergroup Dialogue is a unique effort to engage people in sustained engagements with others from varied racial, gender and class backgrounds and other areas of social differences. Conducted by specially trained facilitators, we have found it possible in these settings for students, faculty and staff to make significant gains in their understanding of themselves and others, in their ability to create positive relationships and empathically identify with people unlike themselves, in their understanding of the complex social world around them, and in their willingness to work toward a more diverse democratic society on campus and off.

2. SUPERVISORY LEADERSHIP DEVELOPMENT PROGRAM

This certificate program offers in-depth training for supervisors and managers who seek to establish or enhance the broad range of knowledge, skills, and abilities required for effective supervision. The SLDP is organized around the core practices of: Managing Self; Managing Others; Managing the Work; and Managing the System. The program covers topics such as Performance Management, Creating a Respectful Workplace, Organizing and Delegating, and Campus Policies.

In this program, you will have the opportunity to talk and network with others who may share the same challenges and experiences of supervision. We will explore the scope of management practices for effective supervision. The series will also pay particular attention to increasing supervisory expertise in diversity and multiculturalism as an integral aspect of successful supervisory leadership.

3. MANAGING MULTIPLE GENERATIONS

Increasingly, managers and supervisors are working with multiple generations in the workplace. The differences among the generations can be one of the greatest challenges facing managers today. In this workshop, we will explore generational differences in employees' work expectations, attitudes, and motivators as well as differences in communication style, work-life balance and interactions with others. We will discuss ways of working productively with different generations and learn how to diffuse workplace tensions when people of different generations-working side by side don't understand each other.

4. DIGNITY VS. DISRESPECT AT WORK

Today's workplace brings us together with people who may be very different from ourselves. Our definitions and practices of respect vary with our family backgrounds as well as with our social identities such as class, race, and gender. This workshop will explore individual and organizational approaches to first notice and deal with the behaviors of a bully before a situation escalates and second to develop and foster respect in the workplace.

Session I: Bullying In the Workplace

- Learn how to identify bullies and bullying behavior
- Examine strategies and resources for dealing with bullying
- Look at workplace characteristics that can contribute to or prevent bullying

Session II: Respectful Workplace

- To recognize how your own social identities influence your definition of respect
- To identify different styles and approaches to giving and gaining respect
- To model and foster respect in your own workplace

5. CUSTOMER SERVICE SERIES

As employees of this UMass campus, each of us plays an integral role in the success and reputation of the institution. Every interaction with our customers is an opportunity to support and further the mission and goals of this campus. This series provides direct learning opportunities to understand and practice skills, and create processes that support excellence in customer service in this diverse and changing world. Sessions may be taken as individual workshops, however, participants must complete all three workshops in this series to receive a certificate. To sign up for the series, you must register for each workshop separately.

Session I: Basic Customer Service Skills

- Provide excellent customer service
- Use self-evaluation to gauge your customer service effectiveness
- Implement successful techniques for in-person and phone customer interaction
- Apply customer-service practices to your workplace

Session II: Managing Challenging Customers

- Solve problems for effective customer service
- Deal successfully with difficult customers
- Anticipate, prevent, and defuse difficult situations
- Spot warning signs of a possibly violent customer and when to ask for help
- Recognize your own customer service hot spots

Session III: Multicultural Customer Service

- How cultural lenses influence our work
- To recognize when cultural differences impact our service effectiveness
- Practices for assuring cultural sensitivity in customer service
- To improve your workplace's multicultural effectiveness

The website URL where information about the cultural competence trainings is available:

<http://www.umass.edu/wld>

Assessing Diversity and Equity

Responsible Party

Ezra Small
Sustainability Manager
Physical Plant

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
-

Submission Note:

Undergrad Campus Climate Survey

http://www.umass.edu/studentlife/sites/default/files/images/CampusClimateStudy2012_Aggregate%20Report_FINAL.pdf

Article on UMass Campaign

<http://dailycollegian.com/2013/10/02/umatter-campaign-aims-to-improve-umass-experience/>

Details on Faculty Advisor on Diversity & Excellence Position

<http://www.umass.edu/chancellor/amilcar-shabazz>

UMass Workplace Bullying Survey

http://www.umass.edu/local1776/Flyers,%20Updates%20&%20Documents_files/WBS%20Final%20Report%202012%2010%2004.pdf

Workplace Bullying Symposium Details

<http://www.umass.edu/events/campus-symposium-against-workplace-bullying>

Article on Chancellor's Efforts to Eliminate Workplace Bullying

<http://www.gazettenet.com/home/6301021-95/umass-chancellor-kumble-subbaswamy-takes-on-bullying-in-workplace>

Jewish Antisemitism Survey Results (2008)

<http://www.umass.edu/jewish/pdf/antistem2008detail.pdf>

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

Has the institution assessed diversity and equity in terms of campus climate?:

Yes

A brief description of the campus climate assessment(s) :

1. UMass Amherst's Campus Coalition Against Workplace Bullying is a working group comprised of the leaders of the five largest campus unions (MSP, PSU, GEO, USA, and AFSCME) and representatives from the Ombuds Office, the Faculty and Staff Assistance Program, the Office of Equal Opportunity and Diversity, the College of Social and Behavioral Sciences, and Labor/Management Workplace Education. The Coalition formed in Summer, 2010, and has met regularly since then. In Spring, 2012, the Coalition conducted a Workplace Bullying Survey of all UMass employees in order to assess the nature and extent of their overall experiences on campus and their familiarity with workplace bullying.

The web-based survey was designed by Coalition members (with some consultation with both Student Assessment, Research, and Evaluation Office and the UMass Amherst administration) and administered by the Massachusetts Teachers Association (MTA) via an email invitation (see Appendix A) distributed on May 3rd to all campus employees (7975 in theory) by UMass Amherst's Human Resources.

2. In Spring 2012 the Division of Student Affairs & Campus Life administered the Undergraduate Campus Climate Survey to gain insights to key elements of the UMass environment as experienced by undergraduate students.

3. In its Diversity Report, the College of Engineering CDSJ Committee reported that in 2009 they resurveyed staff and graduate students, asking about progress since 2005 (the last CDSJ survey). The survey indicated success in several areas, specifically co-worker support, general work satisfaction in immediate work environment and general overall climate of the College. COE contact: Shelly Perdomo, Director for Diversity Program.

4. SARIS conducted a survey in spring '07 for the Office of Programs and Services for ALANA Students (OPSAS). The target population was all undergraduates of color, and the survey included questions asking about use of the various "Success Centers", as well as questions about their experiences with advising and academics. The response rate was pretty low -- only 20%. Jackie Pinn was the client.

5. SARIS conducted a survey in spring 2008 for Larry Goldbaum in Jewish Affairs. Detailed information on this survey is provided below:

The "Survey of Campus Climate for Jewish Students" was formerly titled "Anti-Semitism"; but we changed the name in 2008 to reflect a broader range of questions. These periodic surveys assess the extracurricular, residential, and classroom experiences of self-identified Jewish students. The questions have remained fairly consistent since the survey's inception in 1991, although in 2004 some questions were added to explore Jewish students' perceptions of criticism of Israel by professors, other students, and columnists in the student newspaper. In 2008 we changed the name of the survey and added several questions regarding religious observance.

Has the institution assessed student diversity and educational equity?:

Yes

A brief description of the student diversity and educational equity assessment(s):

<https://www.umass.edu/chancellor/diversity-strategic-plan>

Has the institution assessed employee diversity and employment equity?:

Yes

A brief description of the employee diversity and employment equity assessment(s):

<https://www.umass.edu/chancellor/diversity-strategic-plan>

Has the institution assessed diversity and equity in terms of governance and public engagement?:

Yes

A brief description of the governance and public engagement assessment(s):

<https://www.umass.edu/chancellor/diversity-strategic-plan>

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

<https://www.umass.edu/chancellor/diversity-strategic-plan>

Support for Underrepresented Groups

Responsible Party

Ezra Small
Sustainability Manager
Physical Plant

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.

Submission Note:

Website for WOCLN:

<http://www.umass.edu/ewc/programs/wocln/>

Website for Workplace Learning & Development:

http://www.umass.edu/wld/employee_development_tem.htm

Website for CTFD Campus-Wide Programs:

http://www.umass.edu/ctfd/about/annual_report.shtml

Website for Mutual Mentoring Programs:

<http://www.umass.edu/ctfd/mentoring/exemplars.shtml>

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

Does the institution have mentoring, counseling, peer support, academic support, or other programs to support underrepresented groups on campus?:

Yes

A brief description of the programs sponsored by the institution to support underrepresented groups:

The Center for Multicultural Advancement & Student Success (CMASS) provides academic support, cultural enrichment, student development as well as support for institutional diversity on the University of Massachusetts Amherst campus. This includes peer mentoring, social connection, exposure to national student leadership conferences, help in navigating offices of the Bursar, Registrar or Financial Aid, and more. The center ensures that students have the resources to thrive in an inclusive and multicultural environment during their time at the university. CMASS also provides workshops on diversity at New Student Orientations. The Center operates four distinct cultural centers:

Josephine White Eagle Cultural Center: The Josephine White Eagle Cultural Center (JWECC) provides a warm and welcoming gathering place for Native American students, staff, and faculty at the university. JWECC student staff organizes public lecture events for the campus, student social events, community trips, and community night potluck suppers (with community guest speakers or presenters). They also host health awareness workshops, study nights, craft nights, movie and discussion nights and schedule community meetings. The Center includes a computer lab and the Kitty Wagner Cultural Resource Library, providing books, magazines, newspapers and videos.

Latin American Cultural Center: This cultural center serves as a place for Latino students to celebrate their cultural identity and share it with the larger UMass Amherst community. Social and cultural events organized by the students are open to the public. The Center is equipped with computers, couches, TV and radio. Typical events hosted by the Center in the past include: Latino Comedy Night, Salsa Workshops, Pina Colada and Carnaval Latino.

Malcolm X Cultural Center: The Malcolm X Cultural Center is a multifunctional site that provides space and opportunity for students to develop educational and social activities that enhance and broaden the awareness of the UMass Amherst campus, fellow students and the Five College area community with regards to issues that focus on the African Diaspora. The Malcolm X Cultural Center's goal is to promote community involvement in relation to these issues. The Center annually coordinates a series of campus programming for Black History Month in February.

Yuri Kochiyama Cultural Center: The Yuri Kochiyama Cultural Center aka "the YKCC" is the Asian Cultural Center on the UMass campus. The Center sponsors and organizes cultural and social events throughout the year that create a sense of community for Asian and Asian Americans students and educate the UMass Amherst campus about Asian culture. The YKCC has an office and activities room underneath the Oak Room in the Worcester Dining Commons. The cultural center is used by the YKCC and the various Asian student organizations for meetings and events. The YKCC also annually coordinates Asian Awareness Month in April.

Legacy Living Communities

These communities make it possible for students to live with others who share their interests, ethnicity, identity, or worldview. All of these programs create a supportive living and learning environment that encourages personal growth and academic achievement. These are especially good choices for transfer students and upper-division students who are looking for their niche on campus. UMass Legacy Living Communities include: Asian American Student Program, Harambee African Heritage, 2 in 20 floor, Kanonhsesne: Native American Floor, NUANCE: Multicultural Student Program, & the Lewis International Student Program.

Residential Academic Programs (RAPs)

Several RAPs focus on diversity in particular, Emerging Scholars which is a pipeline into Commonwealth Honors College and a Multicultural America themed RAP which includes Information Literacy & Research, a spring course targeted to underrepresented student populations.

Chelsea & Springfield Compacts

As part of larger partnerships with the Springfield Public Schools and the City of Springfield, UMass Amherst gives Chelsea and Springfield high school students whose families participate in FUEL (Families United in Educational Leadership) and the Access Springfield Promise Program (ASPP), who are admitted to campus, and who meet federal income and eligibility requirements, up to \$13,000 a year toward their tuition and fees. Through the Chelsea Scholars Program and the Springfield Scholars Program, high school students with the greatest potential, who have demonstrated commitment and talent and who have overcome significant odds in their educational background, are eligible to become Chelsea or Springfield Scholars. This extraordinary award is available to as many as 25

Chelsea and 20 Springfield students each year and covers the costs of tuition, fees, room, and board. These students attend UMass Amherst and graduate debt free.

Student Bridges

Student Bridges is a student-initiated outreach program that connects UMass students with local community-based organizations and schools through tutoring-mentoring partnerships, college awareness activities, and policy advocacy. The program has primarily partnered with schools and programs in the Holyoke-Springfield area.

Isenberg School of Management - DiMES (Diversity in Management Education Services)

DiMES allows students to gain an edge by presenting a true image of today's business profession and it works in collaboration with a variety of programs in Springfield and schools as well as nationwide.

College of Engineering – Diversity Programs Office

DPO provides academic and non-academic support to increase enrollment, retention and graduation among under-represented minorities and women. The goal is to assist students in achieving their academic goals by offering services and programs that include seminars, academic assistance and access to undergraduate research and scholarship opportunities.

Northeast Alliance for Graduate Education and the Professoriate (NEAGEP)

NEAGEP sponsors a number of activities to address the shortage of U.S. students, particularly underrepresented minority students, who receive Ph.D.s in the sciences, technology, engineering and mathematics (STEM) and become professors. NEAGEP works closely with Partner and other institutions to encourage and prepare students for graduate work.

Postbaccalaureate Research Education Program (PREP)

PREP encourages students of underrepresented groups who hold recent baccalaureate degrees to pursue doctorates in biomedical sciences. PREP participants work as apprentice scientists in laboratories and participate in professional development activities, as well as taking a course per semester.

Registered Student Organizations & Fraternities and Sororities

UMass currently has 24 cultural and academic ALANA specific Registered Student Organizations that provide a variety of cultural nights, educational events and workshops, and peer mentoring throughout the year. UMass also has 13 ALANA fraternities and sororities and a Multicultural Greek Council.

The website URL where more information about the support programs for underrepresented groups is available:

<http://www.umass.edu/multiculturalaffairs/about/>

Does the institution have a discrimination response policy 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?:

Yes

A brief description of the institution's discrimination response policy, program and/or team:

The Amherst campus Affirmative Action and Nondiscrimination Policy Statement explicitly “prohibits discrimination on the basis of race, color, religion, creed, sex, age, marital status, national origin, mental or physical disability, political belief or affiliation, veteran status, sexual orientation, genetic information and any other class of individuals protected from discrimination under state or federal law.” This policy is intended to establish a firm foundation for achieving campus goals for diversity and inclusiveness.

The website URL where more information about the institution's discrimination response policy, program and/or

[STARS Reporting Tool | AASHE](#)

team is available:

<http://www.umass.edu/diversity/policies.php>

Does the institution offer housing options to accommodate the special needs of transgender and transitioning students?:

Yes

Does the institution produce a publicly accessible inventory of gender neutral bathrooms on campus?:

Support for Future Faculty Diversity

Responsible Party

Victoria Rosen

Sustainability Communications & Marketing Manager
University Relations

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.
-

Submission Note:

<http://www.umass.edu/prep/>

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

Does the institution administer and/or participate in a program or programs to help build a diverse faculty that meet the criteria for this credit?:

Yes

A brief description of the institution's programs that help increase the diversity of higher education faculty:

1) Northeast Alliance for Graduate Education and the Professoriate (funded by NSF and UMass Amherst)

- Provides first- and fifth-year fellowships for underrepresented minority doctoral students in science, technology, engineering and mathematics (STEM) disciplines at UMass Amherst.
- Provides mentoring, networking and professional development activities for underrepresented minority post-baccalaureate and doctoral students in STEM disciplines at UMass Amherst.
- Provides one-year paid internships that include course work, research and professional development activities in STEM disciplines.
- Includes 8-week summer research program for underrepresented minority students who have graduated within the past 36 months in a STEM discipline, but have not been accepted to a doctoral program.

- Provides travel funds for doctoral students to attend national and international scientific meetings

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

www.neagep.org

2. Postbaccalaureate Research Education Program (funded by NIH)

- Provides one-year paid internship program for students who have graduated within the past 36 months with a degree in a STEM discipline, but have not been accepted to a doctoral program.
- Includes GRE preparation.
- Focuses on independent research.
- Provides tuition and most fees for courses that prepare students for doctoral work.
- Provides travel funds for students to present their research at national meetings.
- Provides near-peer and multi-tier mentoring.
- Sponsors monthly social and professional development activities.

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

<http://www.umass.edu/prep/>

The website URL where more information about the faculty diversity program(s) is available :

<http://www.neagep.org/>

Affordability and Access

Responsible Party

Ezra Small
Sustainability Manager
Physical Plant

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
-

Submission Note:

<http://www.umass.edu/umccc/>

*

<http://www.umasslearn.net/programs/summer/powerup>

(please note: all Community Scholarship scholars have their fees for this program covered by the University)

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

Does the institution have policies and programs in place to make it accessible and affordable to low-income students?:

Yes

A brief description of any policies and programs to minimize the cost of attendance for low-income students:

The cost of attendance is based on enrollment, residency and housing, however, the campus has institutionally funded need based aid programs to assist students in covering educationally related costs.

A brief description of any programs to equip the institution's faculty and staff to better serve students from low-income backgrounds:

As mentioned in previous entry all faculty and staff are given the opportunity to take part in Workplace Learning and Development programs that provide employees with the opportunity to improve their cultural competence and awareness of issues related to equity, diversity, and inclusion (including issues of socio-economic difference among students, faculty, and staff within departments and throughout the university).

A brief description of any programs to prepare students from low-income backgrounds for higher education:

To assist first generation and low-income students with transitioning from high school to the UMass Amherst campus, all Community Scholarship** students are given the opportunity to participate in the school's Power Up For Success program, which provides a three-day orientation on navigating the university, study skills, resources the university provides for academic success and co-curricular and experiential programs. Students are also given the option to live in EPOCH, the all-freshmen residence hall.

In addition, UMass Amherst provides an academic support program specifically geared toward first generation college students through the Committee for the Collegiate Education of Black and Other Minority Students (CCEBMS, pronounced "SEBBS").

CCEBMS was designed and developed in 1967 by a group of concerned Black faculty and staff members from the Five College area. The first CCEBMS class, in 1968, consisted of 125 black students. Over the years, thousands of 1st generation students from various ethnic and economic backgrounds, including white and nontraditional students, have completed their college education with the support of the CCEBMS program.

The program enhances the quality of student life in and outside the classroom, through planning, implementing, new innovative academic enrichment programs for students who are largely under-represented at the university. The program provides students with a welcoming and supportive environment that enables them to excel in their academics and complete their studies.

A brief description of the institution's scholarships for low-income students:

The campus has institutionally funded need based aid to assist low income student in paying for educational expenses. In addition, the campus participates in Federal Title IV and State financial aid programs.

**The Amherst campus provides Community Scholarships to first generation and low-income students. This is an annual \$5000 award renewable for four years. The flagship campus budgeted \$1,140,000 dollars to support this program annually.

A brief description of any programs to guide parents of low-income students through the higher education experience:

The admissions office regularly visits high schools in major urban areas throughout New England, New York, New Jersey, Pennsylvania, Florida, California, Texas and select cities across the country. Admissions staff provide helpful informational resource materials at each location and these resources are also made available online. Each visit includes meetings with students, parents, and school counselors at individual high schools and college fairs. See parent resources here:

<http://www.umass.edu/umfa/parents/>

A brief description of any targeted outreach to recruit students from low-income backgrounds:

We visit most high schools in the state of Massachusetts, specifically in the cities of Boston, Lowell, Worcester, Springfield, Lawrence, and Holyoke, where many low-income students attend high school. Additionally, the Visitor's Center hosts over 2,000 students each year that are participants in college preparatory programs such as Talent Search, Upward Bound, and Gear Up. These programs are typically for students from low-income families.

A brief description of other admissions policies or programs to make the institution accessible and affordable to low-income students:

The Admissions Office also has extensive contacts with the Community Colleges in the Commonwealth. The Community College Compact (CCC) was introduced to expand and reinforce access to university through the existing Joint Admissions Program and the Mass Transfer Program. Community college graduates are guaranteed admission if they meet certain criteria. The CCC also provide priority review of their application, transfer credit, financial aid consideration and access to certain housing and registration options.

Throughout the admissions process, the university seeks to recruit and enroll students that will support the University's mission: "The University's mission is to provide an affordable and accessible education of high quality and to conduct programs of research and public service that advance knowledge and improve the lives of the people of the Commonwealth, the nation, and the world".

A brief description of other financial aid policies or programs to make the institution accessible and affordable to low-income students:

Community College students accepted as a Joint Admissions or MassTransfer graduate with a 3.0 or higher cumulative GPA, are eligible for the Tuition Advantage Program. This provides a 33% tuition waiver from the state of Massachusetts, and additionally UMass Amherst will waive the remaining 67% of in-state tuition, resulting in a full tuition waiver if the student meets the following requirements:

- Attend UMass Amherst no later than one year after graduation
- Enroll at UMass Amherst continuously until graduation
- Maintain a 3.0 or higher UMass Amherst GPA after enrollment

Benefits are for up to two years for full-time students and may be adjusted to a longer period for part-time students.

A brief description of other policies and programs to make the institution accessible and affordable to low-income students not covered above:

Does the institution have policies and programs in place to support non-traditional students?:

No

A brief description of any scholarships provided specifically for part-time students:

A brief description of any onsite child care facilities, partnerships with local facilities, and/or subsidies or financial support to help meet the child care needs of students:

A brief description of other policies and programs to support non-traditional students:

Does the institution wish to pursue Part 2 of this credit (accessibility and affordability indicators)?:

No

Indicators that the institution is accessible and affordable to low-income students:::

	Percentage (0-100)
The percentage of entering students that are low-income	---
The graduation/success rate for low-income students	---
The percentage of student financial need met, on average	---
The percentage of students graduating with no interest-bearing student loan debt	---

The percentage of students that participate in or directly benefit from the institution's policies and programs to support low-income and non-traditional students:

The website URL where information about the institution's affordability and access programs is available:

<http://www.umass.edu/umfa>

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

Responsible Party

Ezra Small

Sustainability Manager

Physical Plant

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.

Submission Note:

Note on 2014 date: new collective bargaining agreement contracts have begun being negotiated as of January 2014, per regular contract cycle. As mentioned above, the collective bargaining process for compensation provides an avenue for union representatives and management to jointly seek compensation which each side believes is sustainable compensation.

Compensation policies and practices will vary by collective bargaining agreement. Compensation for non-exempt (classified employees) is defined by job classification, step and grade. Salary grade and step schedules for non-exempt employees can be found in the following collective bargaining agreements:

<http://www.umass.edu/humres/library/USAMTAcontract2009to2012.pdf>

<http://www.umass.edu/humres/library/AFSCME2007-2008.pdf>

<http://www.umass.edu/humres/library/IBPOAcontract2009to2012.pdf>

<http://www.umass.edu/humres/library/IBPOBcontract2009to2012.pdf>

<http://www.umass.edu/humres/library/PSUBcontract2009to2012.pdf>

Compensation policies and practices for exempt employees can be found in the following collective bargaining agreement and salary administration program:

<http://www.umass.edu/humres/library/PSUAcontract2009to2012.pdf>

<http://www.umass.edu/humres/library/SEIUPSSAP.pdf>

General updated links to bargaining agreements can be found here:

http://www.umass.edu/humres/lr_contracts.htm

Note that our listing

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

Number of employees:

6,493

Number of staff and faculty covered by sustainable compensation standards, guidelines, or policies; and/or collective bargaining agreements:

6,000

Does the institution have employees of contractors working on-site as part of regular and ongoing campus operations?:

Yes

Number of employees of contractors working on campus:

50

Number of employees of contractors covered by sustainable compensation standards, guidelines, or policies and/or collective bargaining agreements:

50

A brief description of the sustainable compensation standards, guidelines, or policies; and/or collective bargaining agreements covering staff, faculty and/or employees of contractors:

Professional Positions:

Positions defined as professionals (see Regulatory Environment) are typically covered by the collective bargaining agreement with the Professional Staff Union (PSU) Unit A.

<http://www.umass.edu/humres/professional-positions>

Temp/Non-Benefited Positions:

Not covered

Classified Positions:

Clerical, administrative and technical positions are covered by collective bargaining agreement with University Staff Associates/Massachusetts Teachers' Association (USA/MTA). A list of titles can be found in Section D of Appendices.

Skilled trades and labor positions are covered by collective bargaining agreement with Local 1776 of American Federation of State, County and Municipal Employees (AFSCME). A list of titles can be found in Appendix A.

Those who supervise AFSCME employees are covered by collective bargaining agreement with Unit B of the Professional Staff Union/Massachusetts Teachers' Association (PSU). A list of titles is contained in Article I, section 1.1.

Some positions and employees do not belong to any collective bargaining unit. They are called Non-Unit.

USA/MTA, AFSCME, PSU Unit B and Non-Unit share the same salary schedule. You can also find the salary schedule in each of the collective bargaining agreements.

Police officers are covered by collective bargaining agreements with the International Brotherhood of Police Officers Local 432 Unit A and Unit B. Police Officers have a different salary schedule which can be found within the collective bargaining agreement.

In rare instances, a FLSA (Fair Labor Standards Act) covered position may not fit any state title and thus, cannot be classified. As such, salary administration for the position will be treated as if the position is professional but still subject to overtime rules. Additional Compensation, On-Call Pay and 43 week Appointments are not available to such positions.

<http://www.umass.edu/humres/classified-positions>

Academic Positions:

Faculty and Librarians are, for the most part, covered by collective bargaining agreement with the Massachusetts Society of Professors.

Collective bargaining agreement with Graduate employees and the UAW Local 2322 is administered by the Graduate School.

<http://www.umass.edu/humres/academic-positions>

Post doctoral associates may be covered by the collective bargaining agreement with UAW Local 2322. Article 23 covers salary administration.

Does the institution wish to pursue Part 2 of this credit (assessing employee compensation)?:

Yes

Number of staff and faculty that receive sustainable compensation:

6,493

Number of employees of contractors that receive sustainable compensation:

50

A brief description of the standard(s) against which compensation was assessed:

Coverage under the Fair Labor Standards Act also means application of Massachusetts minimum wage and overtime laws.

The Fair Labor Standards Act Overview:

All professional and The Fair Labor Standards Act (FLSA) , which prescribes standards for the basic minimum wage and overtime pay, affects most private and public employment. It requires employers to pay covered employees who are not otherwise exempt at least the federal minimum wage and overtime pay of one-and-one-half-times the regular rate of pay. For nonagricultural operations, it restricts the hours that children under age 16 can work and forbids the employment of children under age 18 in certain jobs deemed too dangerous. For agricultural operations, it prohibits the employment of children under age 16 during school hours and in certain jobs deemed too dangerous. The Act is administered by the Employment Standards Administration's Wage and Hour Division within the U.S. Department of Labor.

A brief description of the compensation (wages and benefits) provided to the institution's lowest paid regular, full-time employees:

USA/MTA, AFSCME, PSU Unit B and Non-Unit share the same salary schedule:

Job Grade 1, Step 1: \$901.97 bi-weekly

<http://www.umass.edu/humres/sites/default/files/SalScales2012.pdf>

A brief description of the compensation (wages and benefits) provided to the institution's lowest paid regular, part-time employees:

University of Massachusetts Amherst, Professional Staff Union, Professional Staff Salary Administration Program, Salary Schedule: Position Level 24, Minimum: \$33,800

http://www.umass.edu/humres/sites/default/files/2013_PSU_exempt_scale.pdf

A brief description of the compensation (wages and benefits) provided to the institution's lowest paid temporary (non-regular) staff:

"O3" Level 1 wage rates: \$8-12

<http://www.umass.edu/humres/sites/default/files/CC%2003%20Wage%20Rates%202014.pdf>

A brief description of the compensation (wages and benefits) provided to the institution's lowest paid temporary (non-regular, adjunct or contingent) faculty:

Unknown

A brief description of the compensation (wages and benefits) provided to the institution's lowest paid student employees (graduate and/or undergraduate, as applicable):

Unknown

The local legal minimum hourly wage for regular employees:

9 US/Canadian \$

Does the institution have an on-site child care facility, partner with a local facility, and/or provide subsidies or

financial support to help meet the child care needs of faculty and staff?:

Yes

Does the institution offer a socially responsible investment option for retirement plans?:

Yes

The website URL where information about the institution's sustainable compensation policies and practices is available:

<http://www.umass.edu/humres/regulatory-environment>

Assessing Employee Satisfaction

Responsible Party

Ezra Small

Sustainability Manager

Physical Plant

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.

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

Has the institution conducted an employee satisfaction and engagement survey or other evaluation that meets the criteria for this credit?:

Yes

The percentage of employees (staff and faculty) assessed, directly or by representative sample:

100

A brief description of the institution's methodology for evaluating employee satisfaction and engagement:

In January 2014 the UMass Amherst Human Resources Department partnered with Buck Consultants, an external firm specializing in HR management, to conduct a review of employee satisfaction with HR services and programs across the campus.

UMass also conducted a Workplace Bullying Survey of all UMass employees in 2012 in order to assess the nature and extent of their overall work experiences and their familiarity with workplace bullying. This is the first stage of a campaign aimed at spreading awareness about workplace bullying and ultimately to increase safety, respect, and overall employee satisfaction.

UMass Amherst also partnered with a third-party program run through the Chronicle of Higher Education to evaluate employee satisfaction. The "Great Colleges To Work For Program" is an annual survey designed to recognize institutions that have been successful in creating great workplaces and to further research and understanding of the factors, dynamics and influences that have the most impact on organizational culture at institutions of higher education.

UMass Amherst is listed among the Chronicle of Higher Education's "Great Colleges to Work For 2011" in the area of tenure clarity and process. The CHE says "The university tries to 'demystify the tenure process' for faculty, one administrator says. It notes that all junior

[STARS Reporting Tool](#) | [AASHE](#)

faculty in their third year have pre-tenure reviews with the provost's office and can attend workshops to learn more about the process.(Chronicle of Higher Education, 7/25/11)

At the core of the program is a two-part assessment process: a faculty/employee survey (The ModernThink Higher Education Insight Survey©) and an institutional audit capturing information detailing various institution demographics, policies, practices and infrastructure (The ModernThink Institution Questionnaire©).

The survey is anonymous, and is sent to a sample of administrators, faculty and staff. Our Office of Institutional research receive high level summaries of the survey results.

A brief description of the mechanism(s) by which the institution addresses issues raised by the evaluation (including examples from the previous three years):

The campus followed up the workplace bullying survey by requiring a mandatory 90 minute training for all staff to take place in spring 2014 on the subject of workplace bullying and environmental awareness and the Chancellor's Office has established a Workplace Bullying Committee to respond to bullying in the workplace. The Campus Sustainability Manager has been appointed to serve on the hearing committee.

The year the employee satisfaction and engagement evaluation was last administered:

2,014

The website URL where information about the institution's employee satisfaction and engagement assessment is available:

<http://www.workplacebullying.org/2013/06/07/amherst/>

Wellness Program

Responsible Party

Ezra Small
Sustainability Manager
Physical Plant

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
-

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

Does the institution make counseling, referral, and wellbeing services available to all members of the following groups?:

	Yes or No
Students	Yes
Staff	Yes
Faculty	Yes

A brief description of the institution's wellness and/or employee assistance program(s):

The Faculty and Staff Assistance Program (FSAP) is a free, confidential service offering counseling, information, consultation and referrals for UMass Amherst employees, including faculty, staff, graduate employees and postdoctoral fellows; and employees of the UMass Five College Federal Credit Union.

The website URL where information about the institution's wellness program(s) is available:

<http://www.umass.edu/uhs/services/fsap/>

Workplace Health and Safety

Responsible Party

Ezra Small
Sustainability Manager
Physical Plant

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.

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

Please enter data in the table below::

	Performance Year	Baseline Year
Number of reportable workplace injuries and occupational disease cases	525	540
Full-time equivalent of employees	6,271.10	6,071.30

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

	Start Date	End Date
--	------------	----------

Performance Year	July 1, 2013	July 1, 2014
Baseline Year	July 1, 2005	July 1, 2006

A brief description of when and why the workplace health and safety baseline was adopted:

2005-6 was the year prior to first year that Sondra S. the Physical Plant/EH&S Safety officer started working and when many of the safety initiatives were initiated.

A brief description of the institution’s workplace health and safety initiatives:

The University of Massachusetts Amherst Physical Plant Safety Office implements the campus EHS policies, programs, and practices as applicable to Physical Plant operations, which include Utilities, Grounds, and Building Maintenance.

The primary elements of the Physical Plant program include:

- (1) Training
- (2) Inspections/ Audits
- (3) Accident Prevention/ Investigation

We take a pro-active stance which includes heavy emphasis on hazard awareness & assessment, as well as worker participation in all three of the above elements.

Within these general initiatives we may have specific initiatives at any given time. These may be a campus- initiative, or part of a nation-wide (OSHA) campaign. In 2014 these included “Ladder Safety”, “Motor Vehicle Safety”, and “Working in Laboratories”.

The website URL where information about the institution’s workplace health and safety initiatives is available:

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

Ezra Small
Sustainability Manager
Physical Plant

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.

"---" 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:

The UMass Foundation officially announced at the annual meeting of the UMass Foundation Board of Directors on December 8, 2014, the formation of the Socially Responsible Investing Advisory Committee.

Members of the CIR, including affiliations and role (e.g. student, faculty, alumni):

The Socially Responsible Investing Advisory Committee consists of the following members:

David Basile, Senior Vice President/Wealth Management for Janney Montgomery Scott and a 1976 graduate of UMass Lowell (then Lowell Technological Institute) with a B.S. in Business Administration.

Stephen Dunne, Managing Director of the Private Banking North America business in Credit Suisse Securities (USA), a member of the UMass Foundation, a former U.S. Army officer, and a 1989 graduate of UMass Amherst with a B.S., in Mechanical Engineering.

Christine Wilda, Senior Vice President and Treasurer in the UMass President's office, who holds both a Bachelor of Arts degree in

Accounting and a Master's in Business Administration from UMass Amherst's Isenberg School of Management.

John Kennedy, Vice Chancellor for University Relations at UMass Amherst, a former producer at ABC News, and a 1986 graduate of UMass Amherst.

Stephen White, professor of Marketing and International Business at UMass Dartmouth's Charlton College of Business, who holds a Doctorate in Business Administration and a Master's in Business Administration from Cleveland State University and Master's and Bachelor's degrees from Bowling Green State University.

Sharon Cantor, an associate professor in UMass Medical School's Department of Cancer Biology, who holds an undergraduate degree from the University of Michigan and a Doctorate in Biochemistry from Tufts University.

Sarah Freudson, a senior at UMass Amherst majoring in Legal Studies and Women, Gender, and Sexuality Studies.

Nolan O'Brien, a junior at UMass Boston majoring in Political Science and Government.

Examples of CIR actions during the previous three years:

Unknown...

The committee has only met once or twice and there is currently no public information (agendas or meeting minutes available on the UMass Foundation website.

The website URL where information about the CIR is available:

<http://www.umassp.edu/foundation/socially-responsible-investing-advisory-committee>

Responsible Party

Ezra Small

Sustainability Manager

Physical Plant

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 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

Submission Note:

As of June 30, 2014, the University of Massachusetts' pooled endowment fund was \$757M. This fund represents all of the endowed funds across the five campuses (Amherst, Boston, Dartmouth, Lowell, UMass Medical School) which make up the UMass System. In addition to the pooled endowment fund, in December 2014, a social choice fund was established by the UMass Foundation which allows donors the option of having their endowed gifts invested in a socially responsible manner, separate from the general pooled endowment fund. This social choice fund was established by the UMass Foundation with an investment of \$1M.

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

Total value of the investment pool:

757,500,000 US/Canadian \$

Value of holdings in each of the following categories::

	Value of Holdings
Sustainable industries (e.g. renewable energy or sustainable forestry)	0 US/Canadian \$
Businesses selected for exemplary sustainability performance (e.g. using criteria specified in a sustainable investment policy)	0 US/Canadian \$
Sustainability investment funds (e.g. a renewable energy or impact investment fund)	0 US/Canadian \$
Community development financial institutions (CDFIs) or the equivalent	0 US/Canadian \$
Socially responsible mutual funds with positive screens (or the equivalent)	1,000,000 US/Canadian \$
Green revolving loan funds that are funded from the endowment	0 US/Canadian \$

A brief description of the companies, funds, and/or institutions referenced above:

The institutes' social choice fund invests solely in the Neuberger Berman Socially Responsive Equity Fund (NBSLX). NBSLX is an equity mutual fund which incorporates ESG criteria into its investment selection and monitoring process to identify companies which are leaders in sustainable growth and profitability. ESG Criteria used by the fund managers include the following: Environmental Impact, Workplace Policies, Community Impact, Sustainable Supply Chains, Product Integrity and Governance & Disclosure.

Does the institution have a publicly available sustainable investment policy?:

No

A copy of the sustainable investment policy:

The sustainable investment policy:

NOTE: While the University does not have a publically available sustainable investment policy statement, the Foundation is currently working on amending the University's Investment Policy Statement to include ESG criteria in the Investment Committee's investment selection and monitoring process.

Does the institution use its sustainable investment policy to select and guide investment managers?:

No

A brief description of how the policy is applied, including recent examples:

NOTE: The Foundation is currently working on amending the University's Investment Policy Statement to include ESG criteria in the Investment Committee's investment selection and monitoring process. This would also include discussions with existing and potential fund managers as to what type of ESG criteria they consider as part of their investment process.

Does the institution's sustainable investment policy include negative screens?:

No

A brief description of the negative screens and how they have been implemented:

NA

Approximate percentage of the endowment that the negative screens apply to:

0

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?:

No

A copy of the proxy voting guidelines or proxy record:

A brief description of how managers are adhering to proxy voting guidelines:

NA

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:

NA

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:

The Intentional Endowments Network supports colleges, universities, and other mission-driven tax-exempt organizations in aligning their endowment investment practices with their mission, values, and sustainability goals without sacrificing financial returns. In doing so, this broad-based, collaborative network will make a significant and critical contribution to creating a healthy, just, and sustainable society.

<http://www.intentionalendowments.org/>

Ceres is an advocate for sustainability leadership. Ceres mobilizes a powerful network of investors, companies and public interest groups to accelerate and expand the adoption of sustainable business practices and solutions to build a healthy global economy.

www.ceres.org

The website URL where information about the institution's sustainable investment efforts is available:

Investment Disclosure

Responsible Party

Ezra Small
Sustainability Manager
Physical Plant

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?:

No

The percentage of the total investment pool included in the snapshot of investment holdings:

A copy of the investment holdings snapshot:

The website URL where the holdings snapshot is publicly available:

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

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.

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

Innovation 2

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.

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

Innovation 3

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.

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

Innovation 4

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.

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