

AC 8: Campus as a Living Laboratory

4 points available

A. Credit Rationale

This credit recognizes institutions that utilize their infrastructure and operations as living environments for multidisciplinary learning and applied research that advances sustainability on campus. Students that actively participate in making their campuses more sustainable are well prepared to continue that work in their careers and communities after graduation.

B. Criteria

Institution is utilizing its infrastructure and operations for multidisciplinary student learning and applied research that contributes to understanding campus sustainability challenges or advancing sustainability on campus in at least one of the following areas:

- Air & Climate
- Buildings
- Energy
- Food & Dining
- Grounds
- Purchasing
- Transportation
- Waste
- Water
- Coordination & Planning
- Diversity & Affordability
- Investment & Finance
- Public Engagement
- Wellbeing & Work
- Other (e.g., arts and culture or technology)

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 (see Credit Example, below). On-campus internships and non-credit work that take place under supervision of faculty members, sustainability staff, or sustainability committees may count as long as the work has a formal learning component (i.e. there are opportunities to document and assess what students are learning).

This credit does not include immersive education programs, co-curricular activities, or community service, which are covered by the *Immersive Experience* credit, credits in Campus Engagement, and the *Community Service* credit in Public Engagement, respectively.

Projects that utilize the local community as a living laboratory to advance sustainability may be included under “Public Engagement”. A single, multidisciplinary living lab project may simultaneously address up to three of the areas listed above.

C. Applicability

This credit applies to all institutions where students attend the physical campus.

D. Scoring

Institutions earn 0.4 points for each area covered, regardless of how many projects there are in each area. Institutions with projects that cover 10 or more areas earn the maximum of 4 points available for this credit.

E. Reporting Fields

Required

- ☐ Is the institution utilizing its campus as a [living laboratory](#) for multidisciplinary student learning and applied research in relation in the following areas?

- | | |
|------------------|--|
| • Air & Climate | • Water |
| • Buildings | • Coordination & Planning |
| • Energy | • Diversity & Affordability |
| • Food & Dining | • Investment & Finance |
| • Grounds | • Public Engagement |
| • Purchasing | • Wellbeing & Work |
| • Transportation | • Other areas not covered by the above |
| • Waste | (e.g., arts and culture or technology) |

For each area in which the institution has living lab projects, provide:

- ☐ A brief description of the student/faculty projects and how they contribute to understanding campus sustainability challenges or advancing sustainability on campus in relation to the topic

Optional

- ☐ The website URL where information about the programs or initiatives is available
- ☐ Additional documentation to support the submission (upload)
- ☐ Data source(s) and notes about the submission
- ☐ Contact information for a responsible party (a staff member, faculty member, or administrator who can respond to questions regarding the data once it is submitted and available to the public)

F. Measurement

Timeframe

Projects and initiatives currently in progress or conducted within the three years prior to the anticipated date of submission are eligible for this credit.

Sampling and Data Standards

Not applicable

G. Standards and Terms

Living laboratory

Consistent with the American Association of Community Colleges (AACC) [SEED Center](#), living laboratories are defined as campuses that “merge academics and... facilities management to provide students with real-world skills and, for the institution, a path to meet its sustainability goals”.

Credit Example: Campus as a Living Laboratory

Example University utilizes its infrastructure and operations for multidisciplinary student learning and applied research that advances sustainability on campus in the following ways:

- A student completed a capstone project evaluating local carbon offset opportunities for the university. (Air & Climate)
- Students living in LEED-certified housing used and developed “smart home” technologies as part of an independent study course. (Buildings)
- A student spent the summer interning with Physical Plant Continuous Commissioning Engineers surveying buildings, providing research on occupancy sensors, coordinating with lighting projects and developing installations packages that resulted in measurable energy savings. (Energy)
- A group of students conducted a semester-long project to analyze the application of clean and renewable energy on campus. (Energy)
- As a class project, students developed a business plan for a student-governed food cooperative. (Food & Dining)
- Students participated in a year-long study to catalog insect species found on campus. The results were used to inform the university’s integrated pest management program. (Grounds)
- A class completed a Life Cycle Assessment on university vendor practices. (Purchasing)
- A student developed and helped implement a proposal to install bicycle repair stations on campus as the capstone project of an independent study course. (Transportation)
- Students participated in the U.S. EPA Food Recovery Challenge and achieved measurable reductions in campus food waste. (Waste)
- Environmental Studies students constructed a water budget for the campus based on rainfall, evapo-transpiration rate, groundwater availability and other factors. The budget is used to inform campus water conservation strategies and goals. (Water)
- A class conducted a qualitative survey of local community members affected by a proposed campus expansion and presented the results to administrators. (Public Engagement)
- A planning student completed a thesis outlining a smart growth model for the campus. (Coordination & Planning)
- Students gathered and analyzed data for a sustainability report and STARS submission. (Coordination & Planning)
- Sociology students conducted a survey of gender neutral facilities on campus and delivered recommendations to administrators. (Diversity & Affordability)
- Students published a paper detailing the university’s investments in companies that practice and support hydraulic fracking. (Investment & Finance)
- An MD candidate studied health risks associated with pesticide use on campus. (Wellbeing & Work)
- Students in an economics course worked with faculty members to complete a wage study comparing the compensation of university employees with the local cost of living. (Wellbeing & Work)
- An art student’s thesis project examined the role of the creative and performing arts in communicating sustainability and culminated in a campus project to inspire behavior change. (Other - arts and culture)