

Campus Sustainability Lesson Plan

Use this lesson plan if . . .

- You want to incorporate the concept of sustainability into your course.
- You want your students to relate AU's sustainability initiatives to the D.C. region and beyond.

Learning Outcomes

1. Define sustainability and how it manifests itself at American University.
2. Connect AU's sustainability initiatives to local, regional, or national priorities.

Instructions for Facilitation

The activities and resources outlined below are intended to provide several options for creating and facilitating a lesson plan around campus sustainability.

This lesson plan is divided into two parts, A and B. Depending on the topic of the course and the desired learning outcomes, the activities suggested under Part A and Part B can be mixed, matched, or modified to suit the needs of the instructor.

- **Part A** provides students with an introduction to sustainability at American University, including sustainable features of our grounds and campus buildings and basic information about initiatives like zero waste and carbon neutrality.
- **Part B** gives students an opportunity to connect AU's sustainability initiatives with environmental problems and priorities beyond the campus boundary.

Instructors can facilitate Parts A and B during a single class period, or assign activities from each section to their students to complete on their own or in groups (this option can be used by instructors who plan to be absent from class on any given week).

PART A

Ask students to watch or explore at least one of the following resources.

Resource	Description
Campus Sustainability Map	Students can explore this interactive story map to learn about campus sustainability features and locations. Includes content regularly covered during in-person campus tours. The map is mobile-friendly, so students and instructors can utilize it for self-guided tours, too.
Virtual Tour Video	Students can watch a 13-minute video that gives an overview of sustainability at American University, narrated by Office of Sustainability staff and interns.

Note: Exploring the Sustainability Map or viewing the Virtual Tour Video can be assigned to students before class if the instructor will not be in attendance. If the instructor facilitates the class, students can watch the Virtual Tour Video or explore the Sustainability Map in groups or individually, prior to meeting or during class.

PART B

Facilitate or assign one of the following activities. These activities are intended to reinforce and build on the information presented to students in Part A and can be assigned to individuals or groups. ***The final product or deliverable from each activity should be determined by the facilitator.***

Activity 1: Sustainability in Practice

- Assign individual students or small groups a site from the [Campus Sustainability Map](#).
- Ask students to take a trip across campus to visit the site in person. They could take photos of the site and note how the space is being utilized by the community.
- When the students return to the classroom, ask them to conduct online research to find an article or case study about how this sustainable technology or initiative has been implemented somewhere else in the D.C. region.
 - Example: An organization implemented composting at their D.C. headquarters.
- Students can consider: Why was this technology / initiative implemented? What problem does it intend to solve? What benefits or disadvantages does it provide? Based on their research, would they recommend implementing the technology / initiative on a larger scale? Why or why not?

Activity 2: Mindfulness and Sustainability

- Assign locations from the [Campus Sustainability Map](#) to individual students (more than one student can go to the same location, but they should do the activity independently).
- Ask students to sit quietly (and encourage them to turn off their phones) for 10-15 minutes and observe their location. They can draw a picture of the location or write something about the location that stands out at them.
- Questions students can consider at the site:
 - How do the built and natural environments interact here? Is one “winning”?
 - How does the space make them feel?
 - What is something about this location they hadn’t noticed before?
 - Instructors can add any questions that are related to material covered in the course. For example, if course is focused on stormwater management: What happens to stormwater that falls in this space? Can they tell? How?
- Have students share their observations in small groups or with the class after the activity.

Activity 3: Planning for Sustainability

- American University Sustainability strives to align its initiatives and goals with those of [Sustainable DC](#). Before class or at the beginning of the activity, ask students to review the main goals and priorities of D.C.’s sustainability plan: [Sustainable DC 2.0 Plan](#).
- Divide the class into small groups. Students can discuss: What are the primary focus areas of D.C.’s plan? Do any goals stand out to them? Do they perceive anything that might be missing from the plan? Have they seen or read other sustainability plans from cities, counties, or states?
- Ask each group to select a large city anywhere in the United States. Students should conduct online research to find a sustainability plan for that city, if one exists. Provide time for each group to review that city’s plan.
- Groups can consider: Are there similarities between D.C.’s sustainability plan, and the plan for the city they chose? What are the major differences between two plans? Why do they think those differences exist?

Activity 4: Classroom Discussion

Sample discussion questions	
1. Where have you seen green building technologies applied on campus or elsewhere?	<i>Tip: Ask students to talk about LEED buildings they've seen on campus, in downtown D.C., or somewhere else.</i>
2. How can LEED-certified buildings mitigate the impacts of climate change?	<i>Examples: LEED-certified buildings are more energy and water efficient, often include elements that mitigate the urban heat island effect (white roofs, rain gardens), and can include onsite renewable energy.</i>
3. How might campus sustainability initiatives impact the surrounding community?	<i>Tip: Ask students to consider how campus is a resource for the community. For example, our campus is a certified arboretum that is open to all.</i>
4. What aspects of campus sustainability involve human behavior? Are there aspects of sustainability that require individuals to adopt new behaviors?	<i>Examples: Correctly sorting waste into recycling, compost, and landfill bins requires knowledge and action on the part of the individual. Consistently carrying a reusable water bottle might require forming new habits.</i>
5. What are some the pros and cons of implementing sustainable technologies on a college campus?	<i>Example pro: A new academic building is constructed to meet LEED standards, saving energy, water, and money. Example con: Construction of the building is noisy, disruptive, and closes a roadway.</i>

Additional Resources

- [American University Sustainability](#)
 - [Frequently Asked Questions](#)
 - [Building and Grounds](#)
 - [Facebook, Twitter, Instagram](#)
- [U.S. Green Building Council](#)
 - [Leadership in Energy and Environmental Design \(LEED\)](#)

Have questions? Need support?

If you would like assistance putting together your lesson plan, or need guidance for facilitating the activities, please reach out to Kim Westemeier, Instructional Designer with the Center for Teaching, Research & Learning at kpulford@american.edu.

If you have questions about any of the resources outlined in this lesson plan, please contact the Office of Sustainability at sustainability@american.edu.