



Create Climate Change Education Plans

SUSTAINABILITY COMMITMENT(S) THIS INITIATIVE SUPPORTS

- 7 - Sustainability Literacy
- 9 - Courses

INITIATIVE ALIGNMENT WITH THE CHARGE

- Build Community: Faculty, staff, administrators, and students will work together to increase environmental literacy and engage in reducing resource use.
- Be Actionable: Prepare students for future challenges, and will help solidify the university as a leader in sustainability and climate action.

INITIATIVE DETAILS

Initiative Summary

This initiative proposes to establish a university-wide Academic Committee on Climate Change and Sustainability Education within the Provost's Office. The committee will actively develop and implement processes to encourage all academic units to identify their contributions to climate change and sustainability education, and to devise plans for integrating climate change education more effectively into their curricula. This initiative aims to foster interdisciplinary collaboration and innovation in sustainability education while ensuring alignment with institutional goals and enhancing community engagement in climate action. Actionable items include:

- Form a diverse academic committee to guide the development and implementation of climate change and sustainability education plans across departments.
- Establish sustainability liaisons within academic units to facilitate the integration of climate education into existing and new curricula.
- Encourage academic units to articulate how their programs contribute to sustainability and climate education, focusing on both awareness-building and practical, socially just solutions.
- Create a central university webpage to showcase and link to departmental plans for climate education, promoting transparency and accountability within the institution.
- Implement an annual assessment and reporting mechanism to track progress and outcomes of sustainability and climate education initiatives.

Proposed Initiative & Background

Education plays a critical role in social transformations related to sustainability and climate change (Otto et al., 2020). Yet, climate change is a wicked problem, with many causes, and solutions require thinkers

and innovators from a diverse range of disciplines. Thus, there is no one-size-fits-all approach to sustainability and climate change education. Any university-wide sustainability and climate change education effort must leverage the diversity of perspectives, approaches, and expertise within the academic community for learning and teaching about sustainability and climate change. Furthermore, we must take care to leverage these resources and not disenfranchise potential partners in education by alienating them through mandates and other top-down efforts.

The university should establish a university-wide Academic Committee on Climate Change and Sustainability Education, housed in the Provost's Office, which would be responsible for developing and implementing processes for encouraging all academic units to identify ways that their programs can or do contribute to climate change and sustainability education and develop plans for how climate change education can be better incorporated into their curricula. This committee should consist of individuals from different backgrounds and departments to ensure that comprehensive and diverse discussions take place across campus. Plans would be in alignment with institutional learning outcomes, including any new undergraduate learning outcomes related to sustainability and climate change in alignment with initiative 9.1, "Include Sustainability & Climate Forward Thinking as an Institutional Learning Outcome," and initiative 9.2, "Create a General Education Sustainability & Climate Action Requirement." This committee would offer resources, processes, support, and incentives for completing and implementing these plans. These resources would be distributed with consideration given to departments that might require additional support to incorporate these themes effectively into their curricula.

This initiative is not just about developing new courses. There are already many courses at the university that do or easily could incorporate sustainability and climate change education. The purpose of this initiative is to ask academic units to develop a vision for how their programs contribute to building a more sustainable future and addressing climate change causes and impacts, including addressing the social justice dimensions of climate change impacts and solutions. Academic units would be encouraged to think broadly about how their academic foci can contribute to:

1. Bringing awareness and understanding to the climate crisis, including the social justice dimensions and,
2. Preparing students and graduates to reduce their resource use and live more sustainably on the planet. This includes not just individual actions, but also collective problem-solving at local and global scales in all sectors (industry, government, public administration, health care, etc.), with attention to reducing harms to communities that are disproportionately impacted.

It is important to recognize that all academic fields can and should contribute to climate and sustainability education. Sustainability is not solely a science-related field. Solutions to climate change and sustainability challenges require broad-based commitments and innovative thinking that draw on a range of academic traditions and knowledge bases. Arts, humanities, education, business, social & behavioral sciences, information sciences, engineering, public health, law, and medicine all have a role to play. For example, the College of Education and other education-based programs can consider how they prepare education professionals to teach about climate change in schools. The Eller College of Management should include content about sustainable business models. The College of Social and Behavioral Sciences can look at the ways that the humanities connect people to the environment and help us process and survive the impacts of the climate crisis. The College of Fine Arts can include connections to how people express and communicate their thinking about climate change. (The possibilities for connections are more than can be listed here, this list is meant only to seed examples.)

Furthermore, climate change and sustainability are also social justice issues, not just technocratic issues. Academic units should consider how their academic plans incorporate multi-world perspectives on climate and environmental impacts, problems, and solutions. Units would consider and innovate best practices for teaching about sustainability and climate change. See initiative 7.12, “Develop Professional Learning for Teaching About Climate Change.”

Within this initiative, the Academic Committee on Climate Change and Sustainability Education would encourage academic units to consider how their programs and climate education plans go beyond sustainability and climate change literacy to demonstrate 100% engagement in community efforts to address and respond to climate change in socially just ways. This might include opportunities for students to engage in climate change research projects, community research projects, and our community education and outreach programs focused on socially-just responses to environmental sustainability and climate change.

As part of this initiative, academic units would be asked to post their plans on their public websites and linked to a central university webpage that shows how the university has incorporated climate education into all aspects of its academics.

Implementation of this initiative will require an institutional commitment to environmental sustainability and climate change education in alignment with initiative 9.1, “Include Sustainability & Climate Forward Thinking as an Institutional Learning Outcome,” the development of resources to facilitate the process of conducting unit-level program reviews, and support for the development of plans for increasing the emphasis on sustainability and climate change education within their units. It will be important for the members of the Academic Committee on Climate Change and Sustainability Education to include faculty, staff, and students representing a diversity of academic fields and social and cultural identities. The committee will need to establish commitments from college deans and leaders of academic units to champion and prioritize climate change and sustainability education within their units. Colleges may choose to establish a position of Sustainability Liaison who could shepherd plans for each academic unit and report to the Academic Committee on Climate Change and Sustainability Education.

Academic units will need encouragement and incentives to complete their plans. Timelines with deadlines may be helpful, as well as awards or recognitions.

Data Analyses to Support Initiative

Education has been identified as a social tipping point with the potential to lead to social transformation related to reversing climate change (Otto, et al., 2018). Evidence suggests that studying climate change-related content across coursework leads to the development of strong personal connections to climate change solutions which can lead to changes in behaviors that result in the reduction of individual carbon emissions (Cordero, 2020). Engaging students in learning about climate change and environmental sustainability can have a major impact on the reduction of carbon emissions of our graduates.

Students want to learn more about climate change and environmental sustainability. Data from the University of Arizona Community Input Survey show that 89% of students are concerned or very concerned about climate change. In a [Cambridge Assessment International study](#) in 2020, 97% of students aged 13-19 indicated that they desire to learn more about climate change in schools. However, in another [study](#) by Students Organizing for Sustainability International, 40% of students indicated that

they have few options for learning about sustainability in their college courses. Therefore, there is a great need to develop more comprehensive and coherent climate change and sustainability education content at universities.

Resource Requirements & Return on Investment

Resource Requirements

- This initiative is unlikely to require new financial resources and instead should only require time from existing faculty and staff.
- Faculty, student, and administrator time to organize and facilitate the Academic Committee on Climate Change and Sustainability Education.
- Staff and faculty time to conduct the reviews, develop plans, and modify or develop courses if necessary.

Return on Investment

- The return on investment of this initiative is unclear due to the highly qualitative nature of its proposed activities; however, it is unlikely that this initiative will result in a direct return on any investments made.

Potential Funding Sources

- Because this initiative should not require new financial resources and the only resource requirements are employee time, no funding sources should be required.

Accountable Division(s) & Department(s)

- The university-wide Academic Committee on Climate Change and Sustainability Education, housed in the Provost's Office, would be responsible for developing and implementing processes.
- Colleges may choose to establish a position of Sustainability Liaison who could shepherd plans for each academic unit and report to the academic committee on climate change and sustainability education

Partners & Collaborators

- This is an internal initiative that does not necessitate partners. Collaborators could be community organizations that support and/or benefit from student engagement activities as part of their coursework.
- Office of Sustainability

Implementation

Length of Time to Implement

- Less than one year
- One to five years
- More than five years

Difficulty of Implementation

- Low
- Medium
- High
- Extremely High

Relative Timing

- Begin within two years
- Begin in three to five years
- Begin in six years or later

Metrics for Success

- Provide a template/tool to guide academic units in identifying links in their programs to climate change and sustainability education and plans for incorporating and enhancing climate change education in their curricula. The template could include climate equity prompts to encourage academic units to consider the social justice dimensions of their work. Academic units would be asked to submit their plans to a central location by a specified date. Plans would then be available on a website. A timeline for continued review would need to be included.
- Participation rates by academic units.
- The number of faculty who incorporate climate change and sustainability-related content into their coursework.
- The number of courses that meet AASHE STARS criteria.
- The number of students who participate in these courses.
- Assess learning that takes place beyond the classroom setting by adapting and using criteria established in the [Higher Ed Collection of VALUE Rubrics authored by the American Association of Colleges and Universities](#). [VALUE rubrics](#) are already valued and used across HEIC institutions, including the University of Arizona, and can be customized using the core criteria and then implemented in a variety of formats including forms, surveys, and D2L for easy assessment and tracking of existing and well-respected metrics.
- Sulitest or a similar tool could be used as an assessment tool and could inform course content creation.