

Supporting the Academic Component of the Climate Action Plan 2042

This document supports the Academic Component of the Climate Action Plan 2042, providing examples of concrete actions to achieve the academic goals.

The academic program represents the core mission of the College. For that reason, the College curriculum and support for research and programming are essential components of Bowdoin's 2042 Climate Action Plan. Educating the next generation of leaders about climate change is fundamental to the College's purpose – and a liberal arts education is uniquely suited to the challenges of understanding climate change and addressing sustainability.

With intentional facilitation of synergistic cross-campus action, the College's academic mission can be integrated with its effort to address climate change over the next 10 years to achieve the following goals:

Academic Goals:

1. **Raise visibility of our existing climate and sustainability curriculum, scholarship, events and action on campus.**
2. **Facilitate curriculum development on climate and sustainability topics.**
3. **Facilitate interdisciplinary research and outreach on climate and sustainability issues.**
4. **Facilitate data availability in digestible form.**

The insights of multiple disciplines and the talents of passionate scholars mobilizing different forms of knowledge are necessary to meet the climate challenge. Addressing climate and sustainability requires **rigorous scientific research**. But as we see, even innovative and meticulous science is insufficient to tackle the challenges that require collective action toward a common purpose. Instead, climate challenges engage all aspects of human understanding.

- We need **literature and the visual arts** to stimulate our curiosity and compassion to convey the beauty and the fragility of the natural world and to help us imagine alternative futures.
- We need to learn from **history** – from the migration of peoples long ago and from more recent struggles – in order to deepen our understanding of this moment.
- We need **ethics** and the humility to examine our ideas of what constitutes **justice** as we make hard choices.
- We need to engage **diverse communities**, reaching beyond those who share our experiences or our opinions.
- We need the **linguistic skills and cultural sensitivity** to collaborate with and learn from others.
- We need **policy options and legal opinions, persuasive arguments, mathematical models and economic analysis coupled to the science and ethics** to better understand the merits of alternative paths.

Beyond the contributions of different departments and programs to our broader conversation about climate change, the Climate Action Plan can further strengthen innovations in teaching at the College. To grapple with possible trade-offs in any action to address climate change and to best identify co-benefits in how we enhance sustainability, interdisciplinary and collaborative learning across

traditional divides is needed. Whether in the form of new courses, new topics on syllabi, or learning outside the classroom, there are numerous opportunities for:

- Place-based and community-based learning among coastal communities and those in Maine's natural resource economies on the frontline a changing climate;
- Integrated learning that encourages multidisciplinary approaches;
- New approaches to data collection and digital analysis, to allow us to better visualize the ecological, economic, and social impacts;
- Broader training in ethics, regardless of discipline.

There are many exciting ways that individual faculty, academic departments and offices across campus can collaborate to achieve the four academic goals.

The following paragraphs describe a few examples.

Goal 1: Raise visibility of our existing climate and sustainability curriculum, scholarship, events and action on campus.

Bowdoin faculty, staff, and students are already deeply engaged in climate and sustainability issues. However, this engagement may not be easily visible to campus community members or the public. Similarly, from insulation of our steam pipes to the construction of solar arrays on the former naval air station property, Bowdoin's commitment is woven into the infrastructure of our daily lives at the College, and yet much of the work of achieving carbon neutrality is currently invisible to members of the campus community and campus visitors.

Actions to achieve Goal 1 may include:

1. Create a mechanism for students to easily identify relevant courses using key word searches or tags in Polaris.
2. Flag climate and sustainability-related events for the College community and the public. E.g. by creating a logo and/or search term for tagging calendar events.
3. Create and maintain a high visibility webpage that highlights faculty and student research on issues related to climate and sustainability.
4. Create strategically-positioned informational placards and displays to enhance awareness of Bowdoin's work to achieve climate neutrality for our community, visitors and prospective students.
5. Establish an annual Keynote Sustainability lecture.

Goal 2: Facilitate curriculum development on climate and sustainability issues.

The essence of this goal is to identify faculty interest and opportunities for integrating climate and sustainability topics into the curriculum, and – in collaboration with the Baldwin Center for Learning and Teaching and with Academic Technology - to identify and facilitate the support needed to realize those opportunities.

Actions to achieve Goal 2 may include:

1. Identify faculty interest and opportunities for integrating climate and sustainability topics into new and existing courses.
2. Identify and provide workshops targeted to specific faculty interests and support needs.

3. Identify and provide data and academic technology support needed to implement the integration of climate and sustainability topics in courses and research.
4. Develop learning goals and associated assessment for sustainability literacy among students.

Goal 3. Facilitate interdisciplinary research and outreach on climate and sustainability issues.

Through the McKeen center, Bowdoin's commitment to the common good has inspired deep collaborations with the Brunswick community and with other towns and organizations in Maine and beyond, providing opportunities for students to experience research aimed at informing management or policy decisions. In addition, aspects of our own climate action plan, ranging from the installation of new solar capacity to research on the future of Bowdoin's heating system, offer great potential for research on sustainability implementation by students.

Actions to achieve Goal 3 may include:

1. Create a resource of campus and community-based sustainability questions that could provide a focus for independent or class-based student research.
2. Facilitate connections among faculty and community members involved in sustainability implementation.
3. Engage Bowdoin's alumni in this conversation.
4. Provide student fellowships and faculty research funding for research aimed at informing community sustainability implementation (to complement funding for research more traditionally aimed at dissemination to other scholars).

Goal 4. Facilitate data availability in digestible form.

The need for data in a format that is ready for classroom use is interwoven with many of the action items described above.

Actions to achieve Goal 4 may include:

1. Make data available relating to our own campus and climate action plan, as well as from community collaborators and other sources.
2. Collaborate with the library to develop an accessible approach to curating the data to facilitate its use within the limited time-scale of student research or class-based projects.

Ensuring overall cohesion and vitality of the academic plan.

This support for the Academic Component of the Climate Action Plan has been shared with the Office of the Dean of Academic Affairs and work has already begun towards the academic goals. One means by which to continue the momentum and facilitate cross-campus action with cohesion and synergy would be to create a new position of Faculty Sustainability Fellow to work alongside the Office of Sustainability. Alternative approaches to coordinating sustainability education across campus and creating academic opportunities to engage with campus sustainability actions can be found on the Association for the Advancement of Sustainability in Higher Education [website](#).