**Academics and Research**

GOAL: Develop and embed effective sustainability education, research and practice across the curriculum and involve staff and faculty experts in sustainability across campus to provide useful research, co-curricular and service learning experiences for our students, our campus and our community.

**Introduction**

Sustainability is a value that Northern Arizona University has long endorsed in its mission and strategic planning. The university has a rich legacy of curriculum, faculty scholarship, sponsored projects, community outreach, and programmatic activity related to sustainability. Our efforts focus on enhancing the sustainability of cultural, built, and environmental systems, examining the interfaces between each of these areas, and developing and implementing interdisciplinary solutions to environmental and sustainability challenges. Our detailed plan can be found here: http://nau.edu/Green-NAU/AR-SAP-Detailed/

**Academics**

A major driver for our commitment to sustainability education is the need to enhance climate literacy. Strategies specified in Goal 6 of the Northern Arizona strategic plan, *exemplify a sustainable, innovative, and effective university community* by modeling *environmentally responsible and sustainable operations and education* include:

use the “campus as ecosystem” concept across the curriculum to educate faculty and students about the scientific, cultural, socioeconomic, and ethical dimensions of sustainability; and

implement issue-oriented education focusing on topics such as global climate change, resource depletion, water and food issues, and species loss;

enhance course and degree offerings in sustainability;

promote student involvement in co-curricular activities;

improve climate and environmental literacy; and

develop students’ knowledge and skills needed for lifelong engagement in civic

decisions related to sustainability.

**Objective 1**: **Embed environmental sustainability issues across the curriculum.**

**Action 1.** The Task Force on Global Education was created to address the university’s Strategic Plan, Goal 4 on global engagement, diversity, and sustainability. The Task Force has achieved this goal, through a Faculty Senate approved plan to incorporate student learning outcomes within every degree program.

**Action 2. Improve sustainability education through curriculum and co-curricular activities across the campus**

**2a.** Utilize the Environmental Caucus to improve sustainability academics

**2b. Ponderosa Group:** Continue todevelop curriculum through Ponderosa Project style activities including the Provost’s Academic Sustainability Steering Committee.

**Action 3.** Northern Arizona University will continue to promote campus-wide learning opportunities by incorporating sustainability themes into the lecture series and other community engagement activities.

**Action 4.** Develop programs to reward exceptional effort in teaching and mentoring sustainability.

**Action 5**. Create a university-wide sustainability citizenship program to formally recognize any student participating in an organized set of activities related to sustainability.

**Action 6**. Encourage units across campus to involve students and faculty in improving sustainable operations.

**Action 7.** Explore the possibility of assessing incoming students’ environmental and sustainability knowledge (including climate literacy).

**Action 8.** Move beyond the scope of the current GLI. Set an agenda for educating global citizens, recognition of responsibility of higher education.

**Action 9.** Increase the percentage of students taking at least one sustainability-focused course.

**Objective 2**: **Prepare students to compete in and be agents of change for a more sustainability society and economy. Maintain and develop disciplinary and interdisciplinary programs in sustainability.**

**Action 1.** Support existing and develop new degree programs focused on sustainability.

**Action 2.** Develop a Sustainability Graduate Fellowship program to recruit highly sought after students for any Masters Program at NAU.

**Action 3.** Document the progress NAU is making in training sustainability professionals.

**Objective 3: Partner with the community to provide opportunities for students in the green economy.**

**Action 1.** Develop sustainability research and co-curricular activities through internal funding sources including Technology Research Initiative Fund (TRIF) and Education, Research, and Development for the New Economy (ERDENE).

**Action 2**. Northern Arizona University will continue to develop sustainable practices and technologies through its continued support of the Northern Arizona Center for Emerging Technologies (NACET), the Coconino County Sustainable Economic Development Initiative (SEDI), and Arizona Forward.

**Research**

The research enterprise enriches student learning and is a valuable mechanism for improving environmental and sustainability outreach and management activities.

**Objective 1**: **Enhance and maintain the university’s emphasis on environmental and sustainability research and graduate education**.

**Action 1.** Northern Arizona University will assist faculty and staff in the successful completion of an increasing number of sponsored projects in environmental and sustainability fields.

**Objective 2: Increase the university’s impact on environmental and sustainability research through increased publication and outreach activity**.

**Action 1.** Northern Arizona University will continue to emphasize the importance of research and scholarly activities for tenure-track faculty. Increasing the number of publications in environmental and sustainability fields can now be tracked more successfully using Incites or other search tools. However, with our tenure density has gone down to about 46% research productivity is likely to decline.

**Action 2.** Actively promote the Research and Creative Activity awards for most outstanding publications; promote our faculty for appropriate recognitions such as Fellow status in AAAS or the Ecological Society of America.

**Action 3.** Use coursework or more formal mentoring programs to increase the rate at which student projects wind up as peer-reviewed publications.

**Objective 3**: **Promote the university as a responsible sustainable organization with experience in and commitment to sustainable practices.**

**Action 1.** NAU will continue to develop and promote the use of the Green NAU website to promote interdisciplinary initiatives and continue to build off the current sustainability 360 marketing initiative.

**Objective 4**: **Improve fundraising and sponsored projects activities related to sustainability.**

**Action 1.** The EC, Sustainable Academics Steering Committee and CoCoSus will work together on a vision for additional endowed chair or professorship or for other sustainability program opportunities. The university will develop targeted initiatives to promote work in the environment and sustainability.

**Objective 5**: **Maintain and expand the opportunities for undergraduate and graduate student research and for student engagement in off-campus environmental and sustainability activities.**

**Action 1.** Northern Arizona University will build upon successful programs that provide students with research and internship activities in environmental and sustainability fields.

**Action 2**. Build and support opportunities for faculty to work with undergraduates in research projects connected to sustainability.

**Objective 6: provide opportunities for improving green laboratory practices.**

**Action 1.** Work with Office of Research Compliance, and Risk Management to develop educational materials to promote green practices in teaching and research labs. Teaching labs greater volume than research labs.

**Objective 7: Create a voluntary carbon offset tracking and payment system for faculty and student research travel**.

**Action 1.** Develop a voluntary carbon offset program; determine which federal agency support for c offset purchases; distribute c-tracking worksheet already in place: use as model and as basis for a carbon offset calculator.