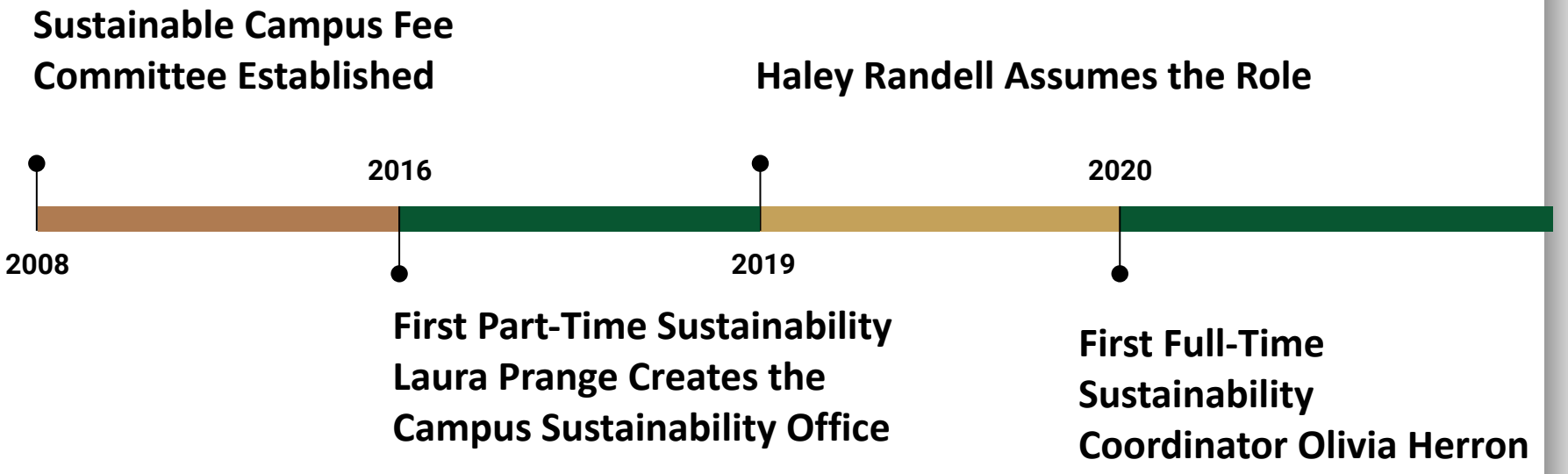
Teaching Sustainability? Need Funding?

Olivia Herron - Sustainability Coordinator

Click here for slide deck with hyperlinks

History of Campus Sustainability



Sustainable Campus Fee

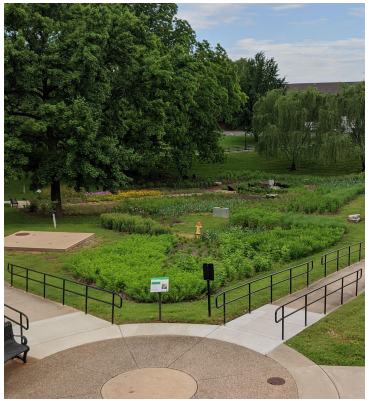
$10

Per Student Per Semester

Cumulatively about $160,000 per year

Recent Projects

- LED lighting upgrades in the Sunquist common spaces, Mabry Concert Hall, Clement Auditorium and Dunn Center.
- Maintenance and repairs to the campus' five solar arrays.
- Installation of native habitats, including the pollinator meadow between Miller and the student center.
- Paid student internships in the Campus Sustainability office.
- Connecting campus to the Clarksville Greenway with a new trail beginning at the intersection of Farris Dr. and Robb Ave.



Academic Applications

Projects

- Provide or demonstrate a specific energy or environmental benefit
- Be technically and economically feasible
- Be cost effective to operate and maintain
- Be consistent with campus standards and master plan
- Be student-driven as much as possible

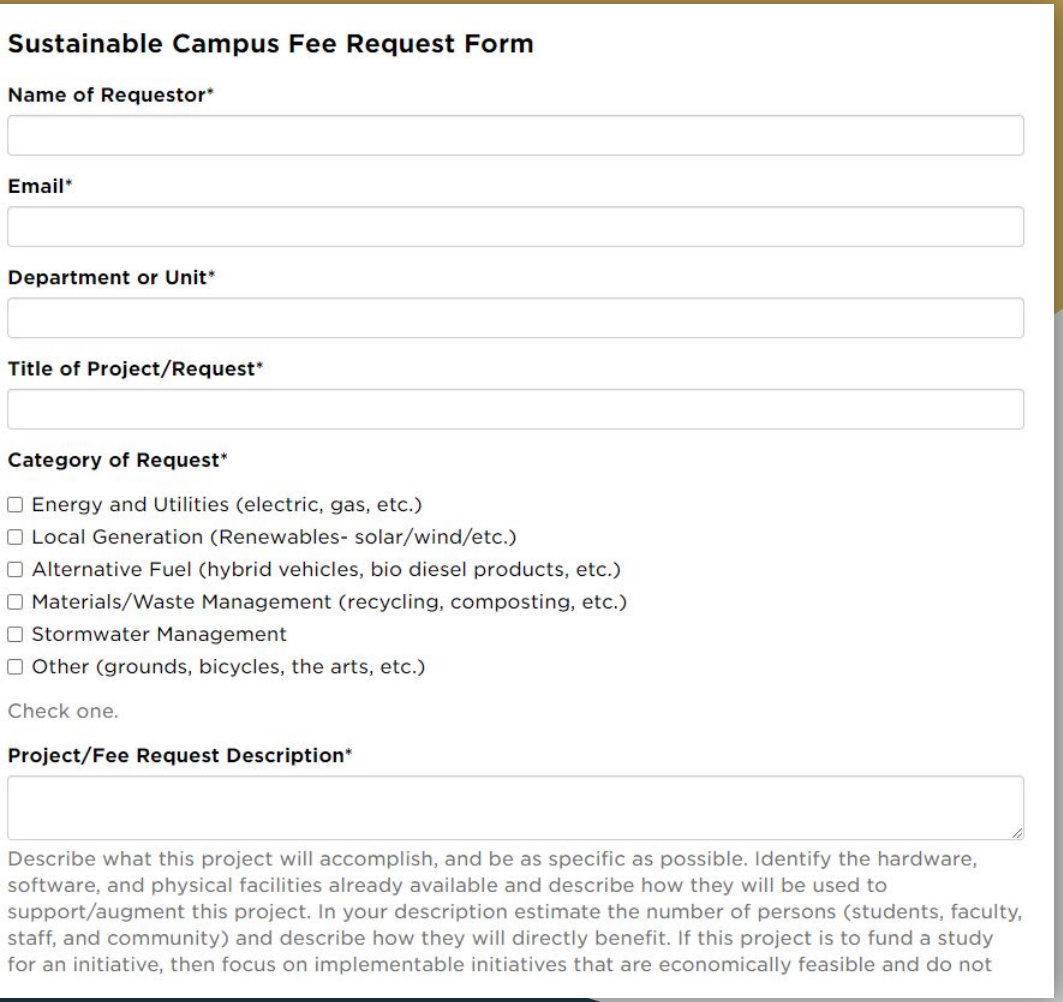
Studies

- Focus on implementable technologies or initiatives that are economically and technically feasible
- Quantify energy or environmental benefit(s)
- Address feasibility, operability, and maintainability of the technology or initiative
- Not duplicate prior, similar studies
- Have significant level of student participation/support

Research

- Focus on identified sustainability categories
- Have significant level of student participation/support

- Nine Simple Questions
- Reviewed the first of each month during the academic year
- View form at: https://www.apsu.edu/sustainability/sustainable-campus-fee-committee.php



Sustainable Campus Fee Request Form

Name of Requestor*

Email*

Department or Unit*

Title of Project/Request*

Category of Request*

- ☐ Energy and Utilities (electric, gas, etc.)
- ☐ Local Generation (Renewables- solar/wind/etc.)
- ☐ Alternative Fuel (hybrid vehicles, bio diesel products, etc.)
- ☐ Materials/Waste Management (recycling, composting, etc.)
- ☐ Stormwater Management
- ☐ Other (grounds, bicycles, the arts, etc.)

Check one.

Project/Fee Request Description*

Describe what this project will accomplish, and be as specific as possible. Identify the hardware, software, and physical facilities already available and describe how they will be used to support/augment this project. In your description estimate the number of persons (students, faculty, staff, and community) and describe how they will directly benefit. If this project is to fund a study for an initiative, then focus on implementable initiatives that are economically feasible and do not

Sustainability is Applicable to All Disciplines


1 NO POVERTY
2 ZERO HUNGER
3 GOOD HEALTH AND WELL-BEING
4 QUALITY EDUCATION
5 GENDER EQUALITY
6 CLEAN WATER AND SANITATION
7 AFFORDABLE AND CLEAN ENERGY
8 DECENT WORK AND ECONOMIC GROWTH
9 INDUSTRY, INNOVATION AND INFRASTRUCTURE
10 REDUCED INEQUALITIES
11 SUSTAINABLE CITIES AND COMMUNITIES
12 RESPONSIBLE CONSUMPTION AND PRODUCTION
13 CLIMATE ACTION
14 LIFE BELOW WATER
15 LIFE ON LAND
16 PEACE, JUSTICE AND STRONG INSTITUTIONS
17 PARTNERSHIPS FOR THE GOALS
SUSTAINABLE DEVELOPMENT GOALS

Sulitest Quiz

Go to https://www.sulitest.org/quiz/
Enter Code: APSU123

SULIQUIZ

THE INTERACTIVE TOOL

Consisting of a set of 6 to 10 questions and played as an interactive game between several teams, the "Quiz" can be used during board meetings, classes, and other events for quick and fun engagement to help raise awareness on sustainability.

HOW DOES IT WORK?

The facilitator displays the "Quiz" questions on a projector screen and participants use their computer, tablet, or phone to connect. Each question is displayed in real-time, and each team member has a certain time frame (normally 1 minute) to respond. After each question is completed, team scores are displayed on a graph, along with a Learning Statement. In the end, a summary displays the overall results and the winning team.

Association for the Advancement of Sustainability in Higher Education (AASHE)

Sustainability Focused Course

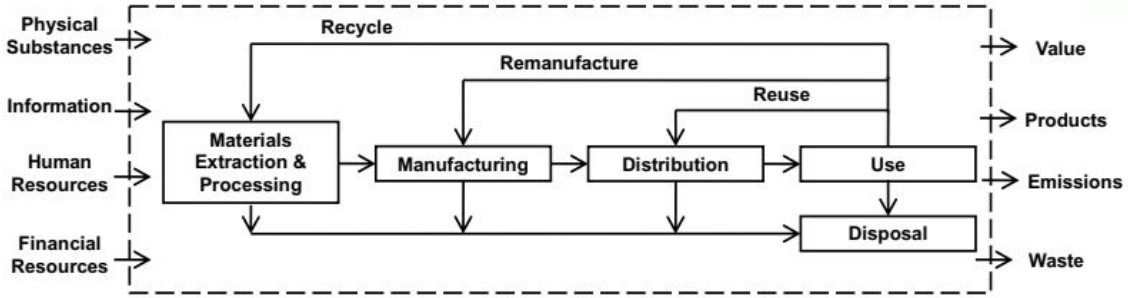
- Foundational courses with a primary and explicit focus on sustainability (e.g., Introduction to Sustainability, Sustainable Development, Sustainability Science).
- Courses with a primary and explicit focus on the application of sustainability within a field (e.g., Architecture for Sustainability, Green Chemistry, Sustainable Agriculture, Sustainable Business). As sustainability is an interdisciplinary topic, such courses generally incorporate insights from multiple disciplines.
- Courses with a primary and explicit focus on a major sustainability challenge (e.g., Climate Change Science, Environmental Justice, Global Poverty and Development, Renewable Energy Policy). The focus of such courses might be on providing knowledge and understanding of the problems and/or the tools for solving them.

Sustainability Related Course

- the course incorporates a unit or module on sustainability or a sustainability challenge
- includes one or more sustainability-focused activities
- integrates sustainability challenges, issues, and concepts throughout the course.

College of Business

- Three Pillars of Sustainability
- True cost accounting
- Global supply chain dispersing environmental impacts
- Cradle to grave product analysis



- There is a moral imperative to teach responsible management as part of business education.
- Covering these topics in core classes may not be sufficient to producing ethical graduates.

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Decoupling responsible management education: Do business schools walk their talk?

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Institutional theory

ABSTRACT

Corporate scandals in recent decades have prompted business schools to advance programs to better develop the next generation of responsible business leaders. Despite these efforts, some scholars have raised concerns about the effectiveness of responsible management education (RME), particularly that business schools have decoupled pedagogical practices from stated RME objectives. That is, a school's actual RME implementation does not match its stated commitment. Given limited empirical evidence verifying decoupling and its conditions, we surveyed undergraduate students at U.S. business schools, applying the theory of planned behavior to assess factors influencing student intentions to practice responsible management in their careers. We found some evidence of decoupling, including indication that a school's external commitment to RME as well as its level of RME curriculum integration do not reliably overcome decoupling to improve RME effectiveness. The results thus indicate that business schools may not fully walk their responsible management talk. We provide feedback on how to help resource-constrained schools combat decoupling, highlighting the need to particularly strengthen faculty subjective norm and student perceived behavior control to better influence student responsible management intentions.

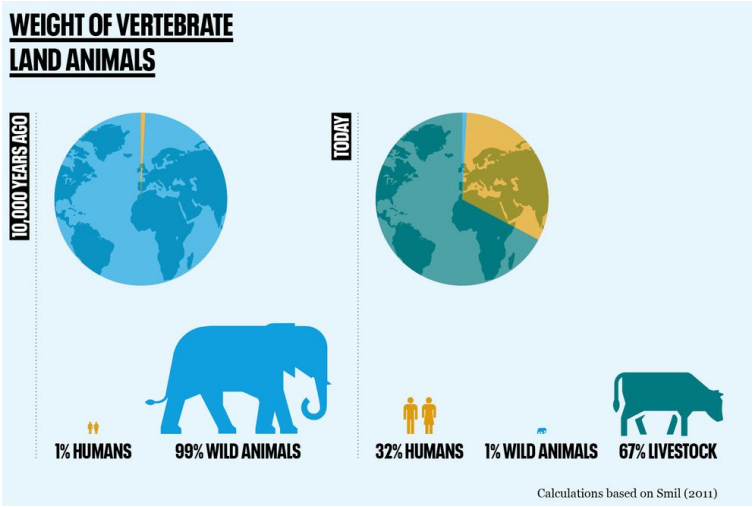
Strategic Management 4810

Capstone Company Analysis

- Cohesion Analysis is a major component of the assignment
  - Asses if sustainability goals are “built in” or “bolted on” to company’s goals, objectives, and policies

College of Arts & Letters

- Environmental journalism
- Graphic design to convey environmental issues
- Environmental/ecological art
- Environmental racism
- Humans' historical interaction with the Earth
- Environmental ethics



Fall 2018

HISTART 105
Eco Art: Art, Architecture, and the Natural Environment
Moffitt 102 | Tuesday, Thursday | 12:30-1:59 pm
Discussion Section: Tuesday | 8:00-8:59 am; 9:00-9:59 am; 10:00-10:59 am

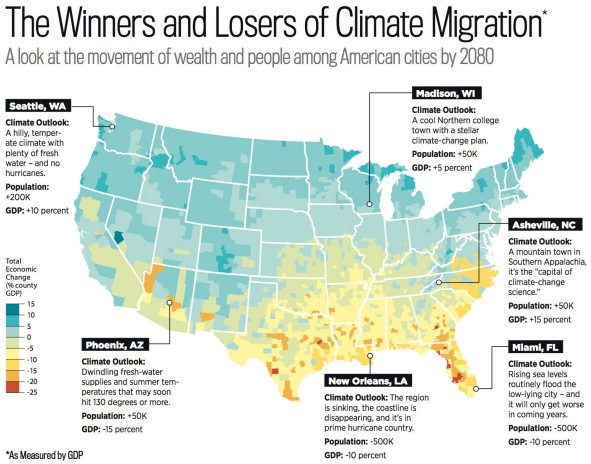
Nuclear disasters. Acid rain. The mass extinction of animal and plant species. The environmental crisis that the planet faces today has fundamentally transformed the way we perceive human interaction with the natural environment. What can art, architecture, sustainable design, urban planning, cinema, and performance practices offer to current debates on climate change and environmental justice? Bringing together the arts and the sciences, the course will examine the role of visual and urban cultures in shaping economic, political, engineering, agricultural, and scientific experiments centered on the earth's ecosystem in the past and in the present. We will analyze key ecological concepts such as energy flow, waste, technology, conservation, and environmental politics as it relates to global visual and urban cultures. Case studies will range from North American indigenous arts to Asian gardens, from colonial medicine to eco-activism in the Global South, from Renaissance experiments in botany to biotech, from urban planning in the ancient world to contemporary green infrastructure.

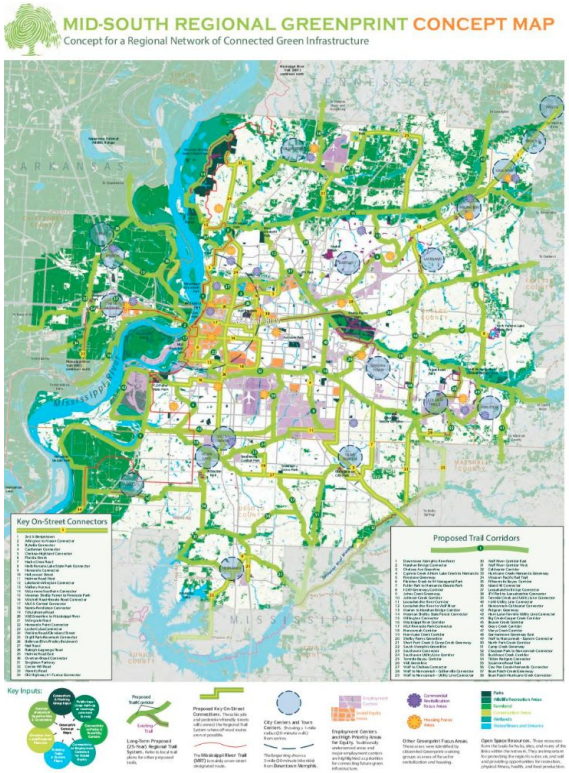
Learning Outcomes

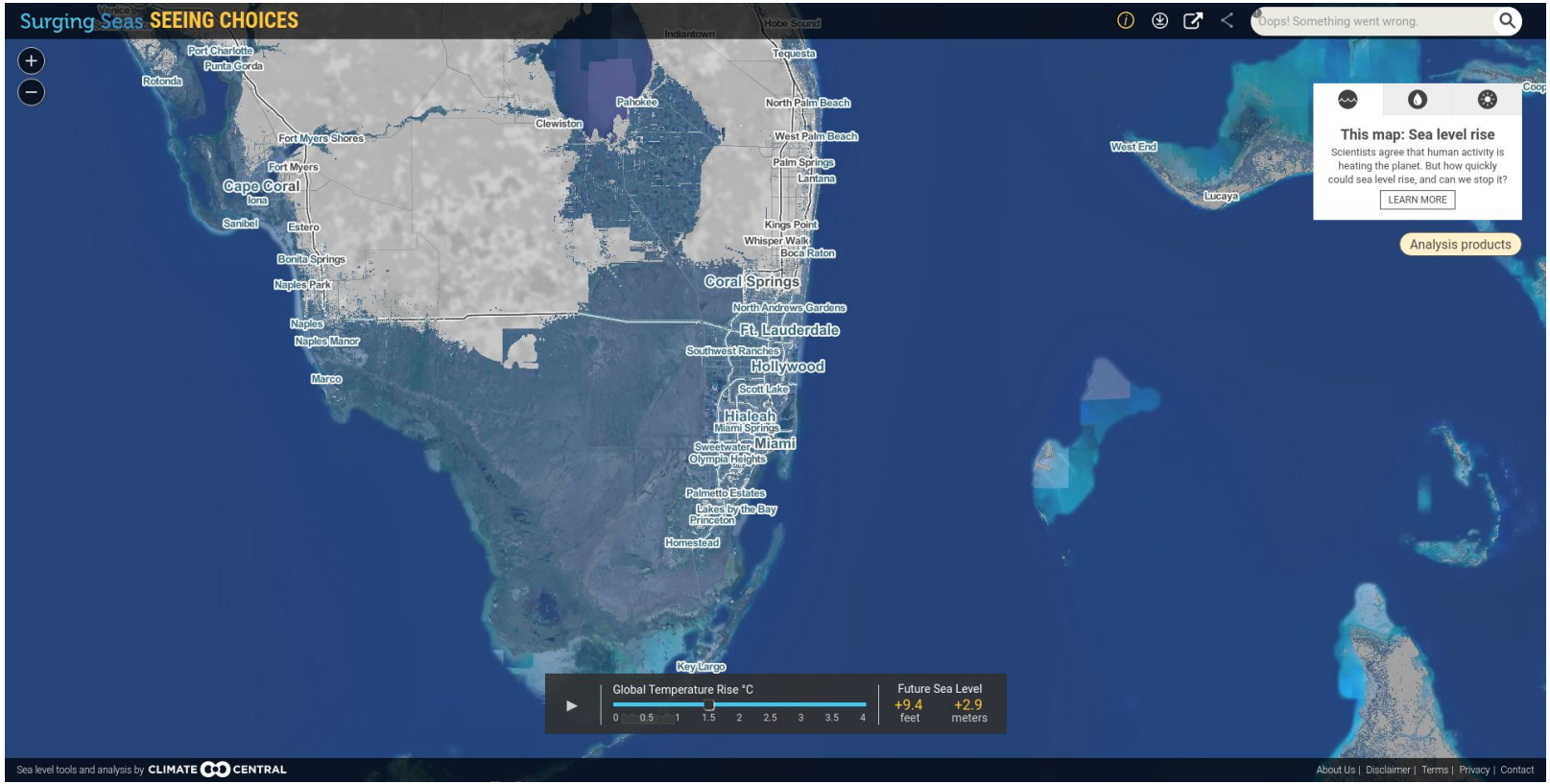
- Developing knowledge of the relationship between art, architecture, urban planning, cinema, and the natural environment
- Developing knowledge of climate change and global warming as it relates to environmental studies
- Developing the vocabulary and skills to make ecologically-informed decisions in life
- Developing skills for visual analysis, critical reading, research, and writing

College of Behavioral & Health Sciences

- Environmental health outcomes
- Climate migration
- Food & water scarcity
- Increased risks of communicable disease
- Frequent natural disasters and heat exposure







Models - Surging Seas: Seeing Choices

International Success

MEDICAL TEACHER
2020, VOL. 42, NO. 2, 150–155
https://doi.org/10.1080/0142159X.2018.1551994

MEDICAL TEACHER
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TWELVE TIPS

'12 tips for teaching environmental sustainability to health professionals'

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ABSTRACT

Background: As recognition of the health impacts of climate change and other environmental challenges increases, so too does the need for health care professionals to practice healthcare sustainably. Environmental sustainability in healthcare extends beyond our traditional understanding of environmental health, which is often limited to environmental hazards and disease. Health services, professional organizations, and training institutions are increasingly forming climate and sustainability position statements and policies accordingly. To prepare future health professionals for global environmental change, environmental sustainability must be meaningfully integrated into health curricula.

Aim: To provide educators with 12 tips for integrating environmental sustainability into health professional education.

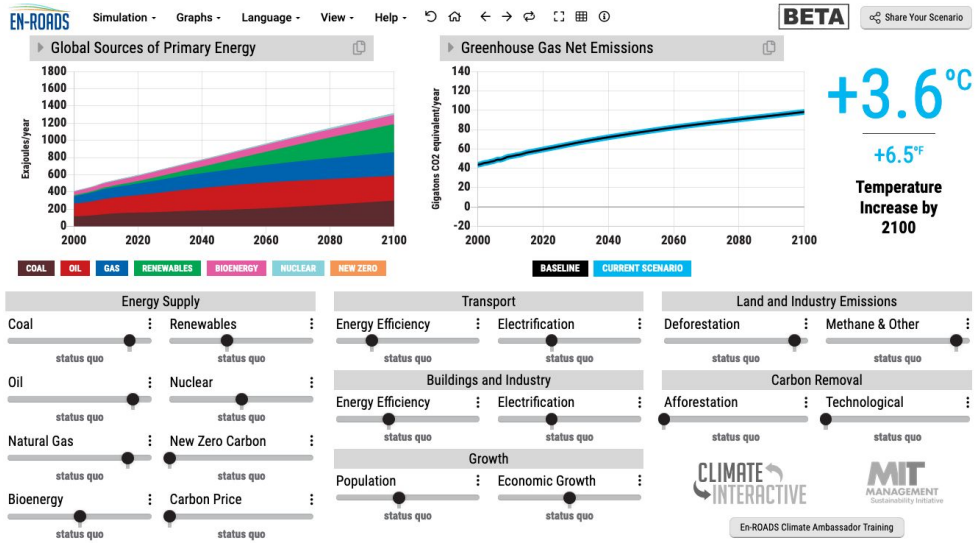
Methods: The authors reviewed the literature relating to climate change, environmental sustainability and health, and health professional education. By combining findings from this search with reflections on their own experience in clinical and public health teaching across nursing and midwifery, paramedicine, medicine, and public health, the authors developed recommendations for integrating environmental sustainability into health professional education.

Results: These 12 tips can be used to teach students and qualified health professionals in nursing, allied health, and medicine to practice healthcare in an environmentally sustainable manner.

Conclusions: Empowering health professionals to practice environmentally sustainable healthcare has economic, social, health, and environmental benefits. Teaching environmental sustainability to health professionals enhances existing learning by updating curricula with the latest evidence of how environmental determinants of health are rapidly changing and enables both educators and students to make an important contribution to safeguarding human health, the environment, and healthcare for future generations.

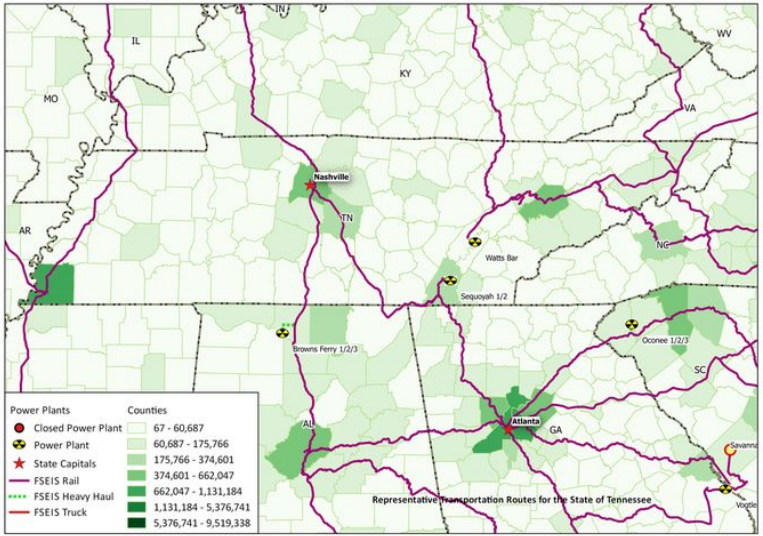
College of Education

- Teach future educators to integrate environmental issues into diverse subject areas
  - Graphical interpretation
  - Modeling
  - Systems based thinking
  - International relations
  - Historical contexts
  - Literature
  - Creative Writing



College of STEM

- Safe chemical disposal and storage
- Geological impacts of environmental disasters/climate change
- GIS mapping of climate related phenomena
- Climate computer modeling
- Engineering climate solutions
- Designing recycling solutions



Open Source Machining Opportunity

Precious Plastics Project

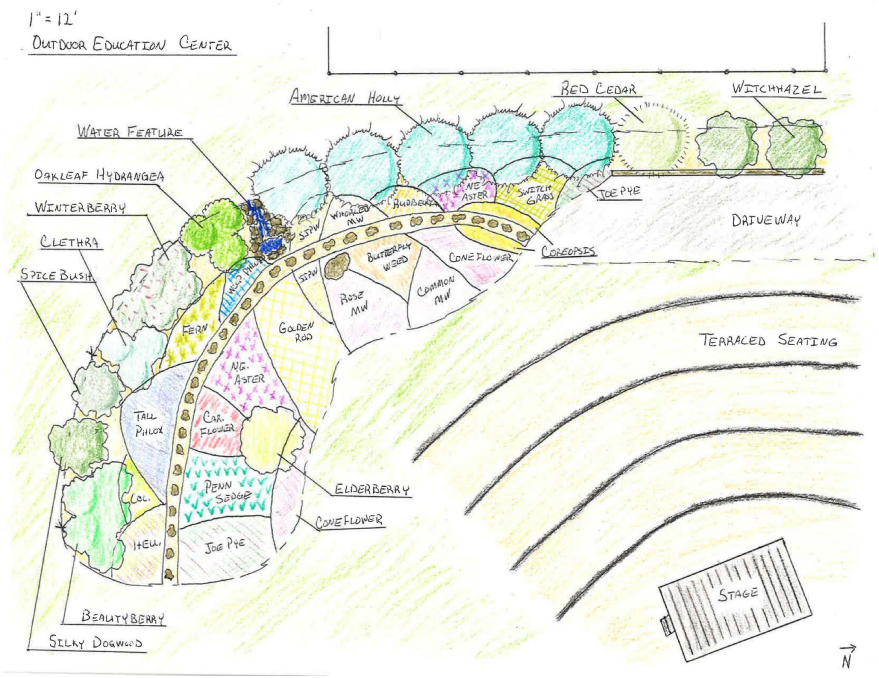
- Provides step-by-step instructions to create recycling equipment
  - Plastic shredder
  - Extruder
  - Injector

Pair and Share Brainstorm

1. What does sustainability mean to you as an instructor?
2. How does it fit into your subject area(s)?
3. What do your students want to learn?
4. How would you integrate it? (readings, lectures, discussions, field trips, in-class exercises)

Existing Campus Resources

Outdoor Education Center



Great Green Idea Contest

- Open to all current students
- Could be used as a research assignment
- Cash prizes
- Held every fall semester

Scoring Criteria

The Sustainable Campus Fee Committee, including students, faculty and staff will judge the entries. We are looking for small to large scale projects that engage student sustainability at APSU! Only current students are eligible to apply.

1. Creativity & Innovation- How original or unique is this idea?
2. Diversity & Inclusion- How does this idea cultivate campus inclusivity and tolerance?
3. Student Engagement & Reach- How many members of APSU's community does this idea positively reach, especially students?
4. Breadth & Impact – Does the project advance sustainability in many dimensions or only one?
5. Savings & Feasibility- How feasible is this idea and does this idea have potential to save our campus money in the long run?

Sustainable Initiative Datasets

- Dunn Center LED lighting project costs & energy savings
- EV charging station install/service costs and visitor data
- Sunquist lighting project costs & energy savings
- Solar panel electricity production data
- EV Fleet vehicle fuel/cost savings

Questions?

Contact: herrono@apsu.edu