

LIVING LAB CASE STUDY

IOWA

HOW PSYCHOLOGY CAN SAVE THE PLANET, PSY:1000

COURSE INFORMATION

- How Psychology Can Save the Planet, PSY:1000
- Shaun Vecera, University Honors Program Director, Psychological & Brain Sciences Professor
- First-year seminar with 20 students

PEDAGOGICAL GOALS

- Facilitate learning an outdoor skill, such as how to identify a tree.
- Provide a structured experience that fosters a personal connection to nature.
- Create a foundation for applying psychological science, using outdoor experiences to explore how exposure to and connection with nature influences human health and behavior.

LIVING LAB USAGE & INSTRUCTIONAL APPROACH

The class meets outdoors once during the semester and uses the campus tree canopy as a living laboratory. Students learn tree identification by applying dichotomous keys to trees on campus, using *Tree Finder by Watts* as a primary instructional tool.

Through guided observation and reflection, students consider what it feels like to be immersed outdoors and how interacting with natural elements shapes attention, perception, and experience. This shared, hands-on encounter provides a foundation for subsequent classroom discussions about the psychological and health benefits of exposure to and connectedness with nature.

Following the outdoor session, students complete a “connection to nature” assignment in which they select a tree they encounter regularly and monitor it over the remainder of the semester. The outdoor activity is supported by targeted readings focused on psychological science research related to nature exposure and well-being.



FREQUENCY OF OUTDOOR LESSONS

1x per semester

STUDENTS ENROLLED IN COURSE

20

LIVING LAB(S) VISITED

Campus Arboretum

STUDENT EXPERIENCE AND OUTCOMES

- Students demonstrate strong engagement during the outdoor tree tour.
- Practicing tree identification on familiar campus pathways helps students recognize how careful observation can transform everyday environments into meaningful learning spaces.
- The outdoor experience increases students' curiosity and confidence in using new tools for noticing and interpreting their surroundings.
- Follow-up reflections show that students develop a greater sense of connection to nature by regularly observing a single tree over the course of the semester.
- The shared field experience provides a concrete reference point for discussing psychological concepts such as attention, perception, heuristics, and behavior change.
- Student reflections consistently describe the outdoor session as a valued and memorable component of the first-year seminar, shaping how they think about both nature and human behavior on campus.



INSTRUCTOR ADVICE FOR IMPLEMENTING OUTDOOR LEARNING

- Plan extra time for outdoor sessions, as activities often take longer than expected due to movement, discussion, and environmental variability.
- Use accessible, well-designed tools to support student confidence and engagement during outdoor skill-building activities.
- Pair outdoor activities with targeted readings or reflections that help students connect their experience to course concepts, in this case, the psychological and health benefits of exposure to nature.
- Design follow-up assignments (e.g., long-term observation tasks) that extend the outdoor experience throughout the semester and encourage continued engagement.
- Collect and reflect on student feedback from outdoor assignments to refine the activity and better understand how students experience learning outside.