

OSU SUSTAINABILITY
COORDINATOR BRANDON
TRELSTAD WALKS THROUGH
OSU'S SOLAR PANEL ARRAY
PHOTO BY TRASK BEDORTHA

The Green Diploma

BEAVERS AND DUCKS
LEARN TO BE ECO-CITIZENS
by Amy Schneider

The expansive atrium of Oregon State University's Kelley Engineering Building fills with the mid-morning chatter of students. Light streams in through the immense glass windows of this certified Leadership in Energy and Environmental Design (LEED) Gold building, reducing the need for electric lighting as it illuminates half-built solar vehicles that look like Mars rovers in a nearby classroom, complete with solar panels and heavy duty wheels.

For all OSU's orange-and-black bravado, the marks of "green" living are everywhere.

Over in the land of green and yellow, University of Oregon Zero Waste Program Manager Karyn Kaplan expands on the virtues of the UO's recycling program, which employs about 60 student workers and has beat OSU in the nationwide Recyclemania challenge for the past two years.

Even if a student enters OSU or the UO without a background on environmental issues, it's virtually impossible to finish a degree without exposure to a well-coordinated latticework of recycling, energy efficiency, enviro-themed classes and an overall attitude that green is good.

With droughts, extreme weather, an ever-increasing carbon load and habitat destruction still in full force, the next generation of leaders would do well to have a firm grasp on environmental issues, and universities are taking the challenge head on. Through academics and on-campus volunteer opportunities, all students, environmental science majors or not, are encouraged to leave wastefulness and ignorance at the gates of both universities.

LEARNING TO LOVE THE EARTH

"Oregon has this green reputation, and I think a lot of students in Oregon have an interest in environmental issues and care about it, even if their ability in doing science and understanding equations isn't that good," says Dave Sutherland, a UO environmental studies professor who teaches "Intro to Environmental Studies: Natural Sciences," a beginner level science course for freshmen and sophomores that fulfills requirements for science and non-science majors alike.

Sutherland says he sees a wide variety of majors in his class, including business and psychology. "I think they take this class because they have some sense that environmental science is important," he says. "It underlines a lot of these things they see in the news every day. Between climate change, fracking, coal trains and all sorts of other topics, it makes it pretty easy to teach the class."

From an academic standpoint, classes like Sutherland's help students develop "environmental literacy," a term that UO Director of Environmental Studies Alan Dickman says "means a lot of different things." Dickman says that enviro-literacy includes understanding scientific issues and policy ideas while also maintaining humility, a sense that "we don't understand it all, that it's complicated and that we're not going to solve it easily with technological fixes."

One way universities expose students to enviro concepts is through offering classes that fulfill core requirements and don't require a complex set of prerequisites. OSU's course list includes "Human Impacts on Ecosystems," taught by botany professor Patricia Muir. As the title suggests, the course covers air quality, changes in global climate, agricultural practices and other ways that humans have directly interfered with the planet's ecosystem.

Another OSU option is geosciences instructor Steve Cook's "Sustainability for the Common Good," a class that requires students to "take on five footprint-reducing actions for four weeks" and asks questions like "Is this a course for 'Oregon Hippies' or for budding 'Sustainability Heroes'?" in the opening lines of the syllabus.

"It's taught by someone who cares deeply about sustainability," according to Brandon Trelstad, OSU's sustainability coordinator. "He has somewhere around 300 students per quarter who are required to break into groups and do some sort of public service."

Trelstad says that over time, these groups eradicated incandescent light bulbs at OSU by reporting them to the Sustainability Office, switching out 300-watt bulbs for 60-watt bulbs.

ECO-INTERACTION

That's the other way students can bolster their environmental literacy: getting involved. At the UO, the Environmental Leadership Program provides undergrads with opportunities to engage in enviro issues, working on projects like MyMcKenzie, an outreach program in which students share their knowledge of the McKenzie River with the community and emphasize its importance as both a resource and a part of the natural world. In 2013, the MyMcKenzie team took middle schoolers into the outdoor classroom of the McKenzie River watershed, showing them old-growth forest and habitat.

The leadership program takes anywhere from 40 to 60 students a year, and Dickman says that it allows students to "work on a problem that has real-world implications where there's no solution already in place. Sometimes they get frustrated, but they typically feel it's one of the most valuable things they've done."

OSU's Student Sustainability Initiative (SSI) is another resource for students who want hands-on sustainability experience. The program is student-fee funded and provides grants to students with innovative ideas, including the student engineers who built the solar vehicles in Kelley Engineering.

Over the last three years, SSI funded about \$60,000 worth of student projects, ranging from a community bike fix-it station to a sustainable cooking series. Students apply for grants, pitch ideas around and collaborate on creating a "culture of sustainability at OSU," according to SSI's website.

Both campuses have recycling centers heavily staffed by student workers and volunteers, including OSU's Waste Watchers team, led by SSI and Recycling Marketing and Development Coordinator Andrea Norris. She says Campus Recycling pairs with SSI to engage students early on, because there's a wide variability in how much students know about eco-related issues.

"We try to get them when they're young, so we're at all the orientation sessions for incoming students, and at the new student picnic, where usually around 2,000 students attend, we do a low waste event to start modeling recycling behaviors," she says. "That's a good first impression to show them how we do things at OSU."

THE GIVE-AND-TAKE OF GREEN

Norris says she's working on a campus-wide recycling survey to eke out the reasons why some people recycle and others don't, because as she says, "Whether you know how to recycle and whether you do it are two different things."

Dickman says he doesn't know of any university-wide efforts to measure environmental literacy in UO students, but Trelstad says the OSU Sustainability Office is in the process of developing a "sustainability literacy assessment," which he says requires entry and exit surveys that evaluate the level of knowledge a student possesses when they enter and how much they've learned after graduation.

As universities like OSU and the UO bolster students for a new world where environmental knowledge is increasingly important, they're also painfully aware of their own carbon footprint as student populations grow, and Trelstad says that's still one of his highest concerns.

"We've seen two years of dramatic reductions from our energy center, and I'm thinking how can we stay on that trajectory when we're growing as a campus," he says. "If I had to articulate a singular goal, it's to reduce our carbon footprint. Our environmental footprint takes various forms, but arguably the most damaging and most critical at this time is carbon. We've got to focus on that." ■