

### 16 Native Plants on Campus

The Museum of Natural and Cultural History's Glenn Starlin Courtyard gives an excellent introduction to many of Oregon's native plants, demonstrating the inherent benefits of using hardy natives in landscape design. Inside the museum visitors can learn about native ecosystems and habitats. The nearby Many Nations Longhouse extends the use of native plants in the landscape onto its "living roof" planted in 2005.





The School of Law features the Environmental and Natural Resources Program: pioneered the first curriculum in public-interest environmental law and first public-interest environmental law clinic. It hosts the world's oldest and largest annual public-interest environmental law conference. It is also the first building on campus to be certified Gold under LEED Existing Buildings: Operations and Maintainance.



# 18 Sustainable Living and Dining

The 2004 Living-Learning Center (LLC) is a social hub for residential life. Dining centers on campus feature locally sourced foods, recycled paper products, and a composting service. The LLC features solar hot water heating, sun shades on southern elevations, and hot water reclamation. To help manage electrical lighting, the LLC features occupancy sensors in resident rooms and night setback controls for corridor lighting.

# 19 Rain and Light - SRC

The Student Recreation Center (SRC) with its new expansion features a newly constructed aquatics center. The old swimming pool is repurposed into a rainwater cistern. The collected rainwater is used as greywater to flush toilets. The SRC also features many daylighting apertures. There are skylights throughout the building with adjustable louvers and interior electric lights adjust with the amount of daylight coming into the room.







21 UO Student Sustainability Center The UO Student Sustainability Center serves as an umbrella organization that encompasses the majority of the student groups focused on sustainability and the environment. The center is organized to be a resource for students and student organizations to network and campaign together to make collaborative campus-wide efforts for change. Stop by the center, located in the breezeway of the EMU.



For an extended tour, look into the following four destinations (on the red route above)

# 22 Global Scholars Residence Hall

This complex boasts the largest green roof on campus, at 10,000 square feet. The rooftop garden on the single-story section of the building (which houses the dining areas, classrooms, and other common areas) is planted mostly with leafy four- to six-inch-tall sedums. This living blanket helps cool the building in summer and keep it warm in winter.





The Center for the Advancement of Sustainable Living (CASL) is located at 1801 Moss Street and soon will operate as a state-of-the-art demonstration home for lowimpact living near campus. The design utilizes innovative technology that integrates natural resources with modern living. It will become the home of three CASL directors who will facilitate tours, maintain the grounds, and will be exemplars of easy and economical living.

# 24 Outdoor Program Barn

The Outdoor Program Barn (where the Bike Program is located, #21) also features a rainwater catchment system for reusing rainwater in the building's washing machine and toilets. There is also a large solar array on the roof.



The 2009 HEDCO Education Building meets the State of Oregon LEED-Equivalent Silver standard. Sustainable design features include a comprehensive stormwater management system (bioswales, rain water collection for lawn and green roof irrigation), water efficient fixtures (30% lower water use than an average building), high performance glazing (projected to perform 32% better than standards), responsible material use, and reduced construction waste (75% below standards).

In 2007 the university reaffirmed its long-standing commitment to sustainability by signing of the American College and University Presidents Climate Commitment. As early adopters of sound environmental practices, the UO is well poised to continue in a leadership role. Plans are under way to do just that. A Climate Action Plan, which describes goals for achieving climate neutrality, was adopted in March 2010, and the precedent setting Oregon Model for Sustainable Development was adopted in 2011.

tours:



Sustainability is no stranger to the university. Since the early 1970s the UO has been recognized nationally for its progressive recycling program and innovative transportation plan. In the 1990s the university stayed in the forefront by establishing an Environmental Issues Committee and adopting a comprehensive set of environmental policies. In 2000 the first Sustainable Development Plan for all physical development was adopted. The university is proud of its nationally ranked programs including the public Environmental Law Program (first of its kind), the Green Chemistry Program, and the #1 rated Architecture Program for sustainable design.

This self-guided tour will take about 1 - 1<sup>1</sup>/<sub>2</sub> hours to complete. The main route is 2 miles in length, while the extended route incorporates an addtional 1.5 miles.

Tour app available for iPhone or Android at: http://itunes.apple.com/us/app/uoregon/id391016299?mt=8

Visit the Campus Planning, Design and Construction website for more information on the university's sustainability initiatives and other campus

> http://uplan.uoregon.edu/ April 2015



UNIVERSITY OF OREGON



Begin at the intersection of 13th Avenue and University Street (#1 on the map)



#### **1 UO Bike Program and Self-Repair Stations** The UO Bike Program increases access to affordable, reliable, and sustainable transportation. The program provides bike self-repair stations, a student bike loan service, a do-it-yourself maintenance shop, and a bike share program.



# 2 Campus Recycling Program

The university's nationally recognized comprehensive Campus Recycling Program was established in 1990. Today it services more than 2,000 collection sites and recovers approximately 50% of the campus waste. A more recent food composting program has reduced waste at major campus events by up to 80%. The student-staffed program is integrated into all aspects of campus life.



#### 3 Auto-free Zone

This bike-filled street was a main auto route through town until 1970 when students barricaded the street to protest the traffic. Since then this portion of 13th Avenue and most of central campus have been an auto-free zone (except for service vehicles). The student design/build Heart of Campus project created a plaza at the intersection of University Street and 13th Avenue, ensuring students can walk safely from class to class.













#### 4 Awnings, Learn from the Past

Awnings such as these on the south and west sides of Johnson Hall are making a comeback. We can learn a great deal from our historic buildings as their original designs often relied on what are now considered sustainable measures. Simple solutions to cool buildings, such as reducing the heat output from lights, enhancing ventilation and daylighting, and installing awnings, should be considered before high-tech solutions. Take the Historic Campus Tour to learn more.

#### 5 Compatible Plants & Wildlife Habitat

This conifer quadrangle is well loved by students and wildlife alike. In order to increase the variety of bird and native plant species on campus, the university implemented the Wildlife Enhancement Project. Native undergrowth attractive to many species of birds has been intentionally planted to create a bird corridor that extends from the Millrace to the Pioneer Cemetery. Tree snags are purposefully left and small birdhouses have been installed across campus.

# 6 Solar Energy - Lillis Hall

Lillis Hall, home of the Lundquist College of Business, uses approximately 35% less energy than state code requires, helping it attain LEED Silver. The solar cells embedded in the glass above the main entrance of Lillis Hall and the large solar array on the roof was the second-largest photovoltaic array in Oregon at the time of its construction (2004). Solar arrays on Lillis, Student Recreation Center, Outdoor Program Barn, and Facilities building total approximately 80 kW.

#### 7 Tree Protection

The approximate 4,000 trees on campus absorb an estimated 200 tons of carbon dioxide annually. The university went to great lengths to protect the mature trees in this area during the 2004 construction of Lillis Hall. The building design was substantially altered to protect existing trees and an innovative temporary bridge was installed during construction to span tree root zones. Take the Campus Tree Tour to learn more.

#### 8 Reuse and Retrofit - McKenzie Hall

The small bioswale (area filled with pebbles) in McKenzie Hall's lower courtyard demonstrates how simple and inexpensive sustainable alternatives can solve big drainage problems that would have required substantial excavation and new piping. This bioswale was part of a major remodeling project that included installing efficient light fixtures, occupancy sensors, and carefully zoned energy efficient HVAC systems.

# 9 Alternative Modes of Transportation

The university is recognized nationally for its transportation innovation. Incentives to ride the bus include free bus passes for all faculty, staff, and students and convenient campus transit stations. Bicyclists have access to more bike parking spaces than car parking spaces (the university has less than half the auto parking of a typical university). Only 12% of students who live off campus drive alone to and from campus. The rest walk, bike, carpool, or take the bus.















# **10 Sustainable Design Education**

The School of Architecture and Allied Arts is home to numerous sustainable design research organizations and student groups such as the Ecological Design Center. The architecture program has been repeatedly ranked first in the nation for sustainable design practices in 2013. The undergraduate programs for interior architecture and landscape architecture were ranked in the top ten.



# 11 Reuse and Retrofit - Willamette Hall

As you enter the Paul Olum Atrium in Willamette Hall, imagine this site as it once was – a collection of ordinary science buildings. Rather than demolishing the old buildings, the university reused them, linking the old and the new to create one of the most well-liked places on campus. The exterior face of one of the original buildings is evident inside this efficient atrium that is neither air-conditioned or heated.



#### 12 High Performance Lab - Lewis

The Lewis Integrative Science Building (Lewis) received LEED Platinum certification, a difficult goal due to the energy-intensive nature of laboratories. Perhaps the most innovative conservation measure is the use of "waste" heat from the utility tunnels that supply steam to campus buildings, providing a free heat source for Lewis. Look for signage in the lobby explaining how occupants can help operate the building efficiently.



#### 13 Green Chemistry Lab

Through the large windows at the very north end of Klamath Hall, you can see the first instructional green organic chemistry lab in the country. Chemistry students learn to use less toxic solvents and reagents, causing less harm to themselves and the environment. This facility also promotes The Center for Workshops in the Chemical Sciences, which teach ways to use green chemistry in undergraduate programs for free.





The Urban Farm, in operation since 1976, is the only hands-on urban agriculture working program housed in a landscape architecture department in the nation. 12,000 pounds of food are produced annually on the farm's 1.5 acres. Students perform thousands of hours of community service each year working with school garden projects, hunger relief initiatives, food security efforts, and cross-cultural food justice projects.

#### **15 LEED Gold - Ford Alumni Center** The 4-story atrium of the Ford Alumni Center serves as

a stack effect return air path to the top of the building, reducing duct work and fan energy. The warm, inviting wood in this space is all FSC (Forest Stewardship Council) certified. Other sustainable design features include radiant slab heating, cork flooring, raised floors for efficient heating and cooling systems, and a white roofing membrane to reduce solar heat gain.