

Introduction to Green Infrastructure



Expo Center Stormwater Wall – *vertical stormwater management solution for dense urban environments*

University of Oregon

Department of Landscape Architecture
LA 459 / 559 Landscape Tech Topics

Spring 2018 – 2 Credits

Fridays – 9:00 to 11:00 am

Lawrence Hall, Rom 231

Saturday Field Trip, April 21st (tentative date)

Instructor

Dave Elkin, Juncus Studio

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Dave is a licensed landscape architect who brings over 19 years of experience in designing, constructing, and managing hundreds of green infrastructure and urban ecological projects throughout Portland. He has been involved in the entire range of topics such as large-scale project implementation, financing, stormwater manuals, artwork in facilities, and public engagement. Dave is owner of Juncus Studios, a local Portland firm specializing in urban ecological solutions.

Course Overview

The natural ecological system and hydrologic cycle has been disrupted by urban development. These urban environments disconnect ecological corridors and generate pollutants that impact our natural waterways. The concepts of urban ecology and green infrastructure have evolved to include a wide range of solutions developed to reduce the impact of urban development on our natural resources. Facilities, such as bioswales and green roofs, provide a critical function of slowing, filtering, and infiltrating runoff from these impervious surfaces. But, as these facilities and concepts have evolved, so has our understanding of their additional benefits within our communities. This class will explore the fundamentals of green infrastructure and urban ecology, and the wide range of scales and variety of potential solutions. Students will learn practical applications of green infrastructure solutions through the lens of a practicing landscape architect.

Course Objectives:

Students will develop a working understanding of:

1. The environmental and societal issues associated with urban runoff and its ecological impacts
2. The variety of codes, stormwater manuals, and legislation related to management of runoff in Oregon
3. The wide range of solutions that has been developed to manage urban runoff
4. Concepts related to planning, design, construction, and maintenance of green infrastructure solutions
5. How to appropriately estimate volume runoff and size stormwater facilities
6. The importance of integrated design as it relates to urban ecology

Course Format

The course will include lectures, field trip, readings, one writing assignment, and two projects.

Course Evaluation and Grading

Each student will be evaluated based on the following:

- Your participation and engagement in meeting the basic expectations of the course
- Class attendance is mandatory unless arrangements have been made in advance
- Readings are offered to support material discussed in class and on trips. Lectures will not be based on the readings. While reading everything is by no means mandatory, you are expected to demonstrate understanding of the course content, including key concepts discussed in the readings through your written assignments and class participation.

Specifically grading will be based on:

Class attendance / Participation	10 points
Written Assignment	10 points
Project #1	20 points
Project #2	60 points

There is no final exam

Graduate / Undergraduate differential

Graduate: 2 credits = 80 hours

In-class	18 (2/session)
Reading	27 (3/session)
Written Assign.	4
Project #1	4
Project #2	31

Undergraduate: 2 credits = 60 hours

In-class	18 (2/session)
Reading	18 (2/session)
Written Assign.	4
Project #1	4
Project #2	16

Academic Honesty Policy

The University Student Conduct Code (available at conduct.uoregon.edu) defines academic misconduct. Students are prohibited from committing or attempting to commit any act that constitutes academic misconduct. By way of example, students should not give or receive (or attempt to give or receive) unauthorized help on assignments or examinations without express permission from the instructor.

Students should properly acknowledge and document all sources of information (e.g. quotations, paraphrases, ideas) and use only sources and resources authorized by the instructor.

If there is any question about whether an act constitutes academic misconduct, it is the student's obligation to clarify the question with the instructor before committing or attempting to commit the act. Principles of academic honesty

and professional ethics also apply to any use of computers associated with the class. This includes observing all software licensing requirements and respecting copyrights of intellectual property published on the Internet.

Disability Resources:

The University of Oregon is working to create inclusive learning environments. If there are aspects of the instruction or design of this course that result in barriers to your participation, please notify me as soon as possible. You are also welcome to contact Disability Services in 164 Oregon Hall at 346-1155 or disabsrv@uoregon.edu