Open Space Planning and Universal Access at Owens Farm and Adjoining Properties in Corvallis, Oregon

Spring 2019 • Mon/Wed/Fri from 1:00 – 4:50 pm • Location: Lawrence Hall, Room 309

Instructor: Jeff Krueger, RLA • UO Pro Tem Instructor • JK Environments LLC • www.jkenvironments.com

<u>Instructor Contact</u>: <u>jkruege2@uoregon.edu</u>, 541-579-0241

Class folder: //aaafileserver.uoregon.edu/courses/_____

<u>Software</u>: We will primarily use Adobe Illustrator and PhotoShop, Google Earth, PowerPoint, the free Avenza Maps App., and the Oregon Wildflowers App. (optional \$10). Opportunities to use ArcGIS for students who have some background and training in the software. Hand drawn maps and illustrations or other design software may be substituted if desired.

Background

In 2002, Greenbelt Land Trust (GLT), the City of Corvallis, and Samaritan Health Services partnered to acquire the 312-acre Owens Farm which is located just to the north of the city of Corvallis. Agricultural use of the land dates back to the mid-1800s and the original farm house and remnants of a barn and outbuildings are still present on the site. A one-room school house was moved onto the site in the early 2000s for future community use. The site contains agricultural fields, currently farmed through lease agreements, along with a mix of high-quality oak woodland, wetland, and riparian habitats. The GLTand City-owned portions of the farm will be managed for habitat, open space, and recreational uses. The 85-acre portion owned by Samaritan Health Services is



reserved for future hospital related expansion, but they hope to fully integrate habitat functions and trail connections that would benefit the physical and mental health of patients, employees, and the visiting community. Owens Farm is a component of a much larger block of permanently protected land totaling over 600 acres that includes the Benton County-owned Jackson-Fraser Wetland (145 acres), GLT conservation easements (162 acres), and City ownership (26 acres).

With input provided by a group of Owen's Farm partners, students will develop conceptual site plans and design details that will include habitat conservation and restoration, historic preservation, siting and design for a universal trails network, and proposals for related facilities. Students will conduct site assessment and analysis in small teams and develop site plans and design details individually. Work will be presented to various Owen's Farm partners and interested parties during the term.

Owens Farm and Jackson-Frazier



Overview of Studio Assignment

Students will begin the studio by learning basic habitat restoration and design concepts, studying and critiquing habitat enhancement projects, and reflecting on their own experiences visiting natural areas in their youth and as adults. We will learn about the native habitats of the Willamette Valley and local ecology through lectures and field trips. We will study trail design and universal access trail concepts and participate in a GLT-sponsored training by visiting trail design expert Larry Knutson in Corvallis in May. The studio will consist of two phases:

Phase I: Site Assessment and Preliminary Site Planning

Initially, students will work in small teams, each focusing on assessing the site under a number of topic areas. Teams will focus on a topic area such as site history, site context, evaluation of existing facilities, landform, surface hydrology, habitat (historical vegetation, existing vegetation communities, rare and unique plant and wildlife, and existing habitat features), target species, and proposed future vegetation patterns (desired future conditions mapping). Additionally, student will work individually to develop preliminary site plans (rough draft for midterm) that propose locations for future facilities, habitats, and a universal access trail network. At the midterm, teams will present their findings and then individual students will receive one-on-one feedback from reviewers on their draft site plans and discuss ideas for detailed design topics they might want to develop during the second half of the studio.

Phase II: Site Planning and Individual Design

Following midterm, students will work individually to refine their site plans and develop detailed designs for at least two site features (students choose topics of focus) and produce supporting materials such as photo imaging, sketches, diagrams, and construction details. Siting of proposed facilities will be done in a way that minimizes habitat impacts, creates an outstanding user experience, and adheres to the guidance of the Owen's Farm partnership. Proposals will be presented individually at the final review and compiled into a PDF booklet for future reference. Representatives from the Owen's Farm partnership will be invited to review our final work and your creative ideas may translate to future onthe-ground projects!



Owens Farm Planning Framework

The graphic below was developed by Owen's Farm partners and will be used to help guide student work.

Framework for Promoting Trail Connectivity at Owens Farm and Adjoining Properties and Neighborhoods

Cross-sector partners advancing holistic, collaborative planning to promote "healthy people in a healthy environment."

Increase Parks, Trails, Trees

- Conserve and restore current natural areas and green space
- Focus land management on collaborative opportunities
- · Connect trail system to neighborhoods
- Protect and sustain native habitats such as Oregon white oak
- Optimize shared services on natural areas

Increase Access to Outdoors

- · Ensure ADA accessibility
- Use Crime Prevention Through Environmental Design (CPTED)
- Engage diverse communities to design multi-use trails and access points
- Focus on group experiences and on-site learning
- Develop bilingual and culturally specific park guides, maps, and kiosks
- · Offer a range of natural area experiences
- Implement City's Owens Farm Master Plan

Safe, Outdoor Access for All



Reduce Barriers to Outdoors

- Improve transportation to park for specific populations
- Address Hwy 99 speed, lack of turn lane, and lack of sidewalk
- · Create sufficient car and bike parking
- Identify and develop Safe Routes to Parks
- · Mitigate agricultural pesticide use
- Develop on-site infrastructure such as bathrooms, benches, and meeting spaces

Activate Programming

- Design meeting/picnic/resting space
- Foster conservation, historic, and cultural preservation and programming
- Organize school field trips, hands on learning, and Rx Outdoors
- Develop robust volunteer naturalist programs
- Sponsor community-led, culturallytailored group outings
- Provide therapeutic gardens, nature therapy, and walking meditation

Stakeholders: Samaritan Health Services (SHS), City of Corvallis, Greenbelt Land Trust, Benton County, Employees and Patients of SHS, Lewisberg Residents, Surrounding Neighborhoods, Mobile Home Community, Businesses along HWY 99, Crescent Valley High School, Cheldelin Middle School, Users of McDonald Forest/Jackson Frazier Wetland, OSU Research Forests, Historic Preservation/Education Stewards, Tribal and Other Cultural Groups, Oregon Department of Transportation

Framework adapted from Willamette Partnership's An Oregon Action Framework for Health and the Outdoors, Version 1.0, November 10, 2015.

Final Draft 02.26.18

Instructor

Jeff Krueger is a registered landscape architect in the state of Oregon and has over twenty-five years of experience providing planning, design, and project coordination for local governments and non-profit organizations in the Willamette Valley. He founded Jeff Krueger Environments LLC in 2013. He has previously worked for Lane Council of Governments, the U.S. National Park Service, Massachusetts State Parks, and two private landscape design firms. Jeff has extensive planning and design experience in the areas of natural resources, habitat restoration, parks and open space master planning, recreational trails, land use, and bicycle and pedestrian facilities. Jeff holds a degree in Environmental Design from the University of Massachusetts (1987) and a BLA and MLA from the University of Oregon (1991/92). Jeff has been an Instructor with the Department of Landscape Architecture since 2014 and brings real world experience to the studio.

Learning Outcomes

Participants in this course will develop an appreciation and understanding for native habitats and local ecology; Learn how to assess site conditions of a large natural area site; Develop a working knowledge of habitat restoration and management techniques for a variety of local habitat types; Understand species-specific habitat requirements and enhancement techniques; Learn and apply trail planning and design concepts; and explore approaches that integrate human uses such as trails, user infrastructure, and a variety of recreational facilities into natural systems.

By the end of the course, students will be able to:

- Conduct detailed site analysis and mapping of a natural area to guide habitat restoration and management decisions.
- Use guidance from local, State, and Federal trails plans including the Oregon Conservation Strategy (ODFW, 2016) to guide species-specific habitat restoration and management actions.
- Use historical aerial photos and maps to document site history and changes in vegetation.
- Design and site infrastructure and recreational facilities in a way that minimizes habitat impacts and maximizes user experience.
- Design a trail network with an emphasis on universal access.
- Use Adobe Illustrator and Photoshop to create thematic maps, plans, photo imaging products, and details.

Guidelines for Studio Participation

- <u>Scheduled Class Time</u>: Students must be present during the regularly scheduled studio time. If a student is not able to attend they should notify the instructor in advance to request an excused absence. We will have a regular class meeting at 1:00 on most days and a class check-in at about 4:30 on most days.
- <u>Individual Site Visits</u>: In addition to the two scheduled class field trips, students are encouraged to visit the site to gain a better appreciation and understanding of on-the-ground conditions. It is highly recommended that students partner up for site visits. Please coordinate site visits with classmates or friends. If you are unable to arrange a partner for a site visit, please contact the instructor and he may be able to accompany you or connect you with an Owens Farm partner in Corvallis. Please stay on public or GLT land and respect private property rights. The Avneza map app will be a useful tool for verifying your location in the field.
- <u>Consolidating Questions and Requests</u>: Questions or requests for data or information from GLT, City, County, or Samaritan Health Services should be coordinated through the instructor.
- Grading Standards: This course is graded on a pass/no pass basis. To pass the course, students must attend class on a regular basis (a minimum of 90% attendance), actively participate in group discussions, adequately complete all assignments, and make presentations at the midterm and final review. Two or more unexcused absences are grounds for a marginal pass. Preliminary assignments are given at the beginning of the term, but modifications and additions may be made following the midterm review. All final work must be submitted to the instructor in electronic format (PDF) before a grade will be submitted.
- <u>Exit Interviews</u>: Exit interviews are required and will be conducted either Friday of review week or early in exam week. Students MUST be available to meet during these times.

University and Department Policy

Academic Misconduct Policy

The <u>University Student Conduct Code</u> 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 the sources and resources authorized by the instructor. If there is any question about whether an act constitutes academic misconduct, it is the students' obligation to clarify the question with the instructor before committing or attempting to commit the act.

Accessible Education

The University of Oregon is working to create inclusive learning environments. If there are aspects of the instruction or design of this course, which may result in barriers to your participation, please notify the instructor as soon as possible so that accommodations can be made. We are happy to modify the course requirements as needed to allow individuals with any limitations such as sight and mobility to participate and your perspective could provide a valuable learning opportunity for the entire class. You may also wish to contact the <u>Accessible Education Center</u> for more information about the University of Oregon policies.

Inclusion Statement

The School of Architecture and Allied Arts is a community that values inclusion. We are a committed to equal opportunities for all faculty, staff and students to develop individually, professionally, and academically regardless of ethnicity, heritage, gender, sexual orientation, ability, socio-economic standing, cultural beliefs and traditions. We are dedicated to an environment that is inclusive and fosters awareness, understanding, and respect for diversity. If you feel excluded or threatened, please contact your instructor, department head, or the <u>University Bias Response Team</u>.

Proposed Class Schedule: Spring Term 2019 (subject to change)

Dates	Activities	Assignments
Week 1		
Monday, April 1	Class introduction, studio overview, expectations, review syllabus and schedule, safety, and arrange our studio space. If time permits, test Avenza App. Lecture by Jeff: Quick look at our site; Conservation planning basics for natural areas; Trails planning basics; Shared terminology, etc.	Download Avenza App (if you own a smartphone). Test the App using georeferenced PDF provided by Jeff. Hand Out Assignment #1: Topic Area Case Studies: Habitat management plans Pedestrian crossing options on high volume roads Trails planning and design Universal accessibility
Wednesday, April 3	Lecture by Jeff: Introduction to Owens Farm and Quick Tutorial on Google Earth (KML demo) Hand out assignment #1 Sign up for topic area for assignment #1 Introduction to upcoming group assignment #2 Pick site evaluation topic and form teams. You and your teammate(s) will begin working on this in the field on Friday. Possible guest speaker – Michael Pope of Greenbelt Land Trust (or might meet us in the field on Friday)	Provide an overview of Assignment #2 and form topic-specific teams. We will hand out the assignment on Monday.
Friday, April 5	Field Trip – Owens Farm and adjacent open space – Dress for outdoors, wear good walking shoes, long pants, bring camera, charge phones for Avenza app use. Transportation will be provided. Guest Tour Guide – Michael Pope of Greenbelt Land Trust	Poll class to determine if a later return is an option
Week 2		
Monday, April 8	Students Presentations: Assignment #1 (3-5 minutes each). Tell us some key things you learned. Teams work in class: Identify midterm products and assign/select area of focus within your team. Create an outline of products for Jeff to review today or by Wednesday. Define planning area map window. Jeff will create base maps of available GIS data and export to AI format. We will use a standard format of 11 x 17 where possible. Possible guest speaker – Matt Blakely Smith – GLT ecologist Optional Training: Optional Adobe Illustrator tutorial if needed from Jeff	Assignment #1 due at beginning of class. Hand Out Assignment #2: Team Site Evaluation Assignment Site evaluation topic areas: Human history Site context Existing facilities Landform and hydrology Habitat 1 Habitat 2
Wednesday, April 10	<u>Teams work in class</u> : Groups finalize products list and meet with Jeff for feedback and approval.	

Dates	Activities	Assignments
Friday, April 12	Field Trip – Dress for outdoors, wear good walking shoes, bring camera. Transportation will be provided. This will be an opportunity for you and your team to do on-the-ground evaluation and site	
	analysis.	
Week 3		
Monday, April 15	Work day and desk critiques	
	Work with team to compile assignment #2 products into a concise (5-10 minutes) presentation for midterm.	
Wednesday, April 17	Lecture by Jeff: Trails planning, design, and universal access concepts Work day and desk critiques	
Fri., April 19	Group Presentations - of Assignment #2 Digital Pin-Up (PowerPoint or PDF presentation format)	Assignment #2 due
Week 4		
Monday, April 22	Work with team to refine assignment #2 products Hand out assignment #3	Hand Out Assignment #3: Individual assignment. Select topic areas for post-midterm design. Develop diagrammatic Proposed Site Plan (trace over base map). — This is intended to give you something to discuss with reviewers at midterm. You will refine during the second half of the term.
Wednesday, April 24	Work Day and individual desk critiques	
Friday, April 26	Work Day and individual desk critiques	
Week 5		
Monday, April 29	Work Day and individual desk critiques	Draft Assignment #3 due
Wednesday, May 1	Finalize midterm presentation and refine individual work	Alternate Date for Midterm Presentations
Friday, May 3	<u>Midterm Review</u> (1:30-4:30). Team presentations and individual pin up (2 reviewers) – We will use self-selecting reviewer approach.	Midterm Presentations
Week 6		
Monday, May 6	Class to Possibly Attend Universal Access Workshop/Training in Corvallis with Larry Knutson (date TBA) Class meeting - Debrief midterm and overview of Assignment #4 (final	Assignment #4: Assignment for final review. This will be an individual assignment and include development of a Site Plan as well as
	review). Discuss desired format for final review.	detailed design for two areas or topics (students choose topics from
	Work in class: Determine what needs revision from midterm work and begin individual work (Assignment #4)	a list or propose other topics) Outline is due for approval on May
Wednesday,	Class to Possibly Attend Universal Access Workshop/Training in	10. Products are due on May 29.
May 8	Corvallis with Larry Knutson (date TBA)	
	Work Day and meet with Jeff to get list of final review products approved.	

Dates	Activities	Assignments
Friday, May 10	Work Day and desk critiques – Possible site visits Class to Possibly Attend Universal Access Workshop/Training in Corvallis with Larry Knutson (date TBA)	Assignment #4 outline due (Review your proposed list of final products with Jeff)
Week 7		
Monday, May 13	Work Day and desk critiques Class to Possibly Attend Universal Access Workshop/Training in Corvallis with Larry Knutson	Note: these two weeks are critical. Design iteration is important, so don't wait until the end to finish.
Wed, May 15	Work Day and desk critiques - Possible site visits	Assignment #5: Vivid Presence Exercise (due May 20)
Friday, May 17	Jeff Out of Town - Work Day and desk critiques – Possible individual site visits	
Week 8		•
Monday, May 20	Jeff Possibly Out of Town – Students share their vivid presence (this will be fun) Work Day and peer review desk critiques – Possible individual site visits	Assignment #5 Due
Wed, May 22	Work day and desk critique	
Friday, May 24	Work day: prepare presentations	
Week 9		
Monday, May 27	Memorial Day – No Scheduled Class	
Wed, May 29	Pin up draft materials for Jeff and peer review (half of class)	Assignment #4 due: Final review materials
Friday, May 31	Pin up draft materials for Jeff and peer review (other half of class)	
Week 10		
Monday, June 3 - 6	FINAL REVIEW (Date TBA)	
Friday, June 7	Individual meetings with Jeff: debrief and evaluation may need to schedule some for Monday.	

Resources for Natural Areas and Trails Owens Farm Studio

Habitat and Wildlife

- Oregon Conservation Strategy (ODFW, 2016) Essential Statewide resource for guidance on determining target habitats and species.
- <u>A Landowner's Guide for Restoring and Managing Oregon White Oak Habitat</u> (Vessy and Tucker, 2006).
- A Practical Guide to Oak Release (USDA, 2006) -
- The Willamette Valley Landowner's Guide to Creating Habitat for Grassland Birds (ODFW, 2007).
- <u>Practical Guidelines for Wetland Prairie Restoration in the Willamette Valley, Oregon</u> (Lane Council of Governments, Institute for Applied Ecology, and City of Eugene, 2014) -
- Oregon Department of Fish and Wildlife Species Information (ODFW) Oregon wildlife identification, photos, habitat requirements.
- <u>Oregon Explorer Website</u>. (ODFW). This includes a map viewer and general Oregon wildlife and habitat information.
- Garry Oak Ecosystems Recovery Team website Portal to multiple oak habitat resources.
- <u>Cascadia Prairie-Oak Partnership (CPOP)</u>. This partnership site includes a technical library for publications related to oak and prairie habitat.
- <u>Conserving Oak Habitats in the Southern Willamette Valley</u> (Rivers to Ridges Partnership, 2015). Fact sheet.
- <u>Plant Database</u> (USDA). Detailed information about plant species
- <u>Salix Associates website</u>. This is the business website of local ecologist Bruce Newhouse and includes some
 great tables and information about native plants, native butterflies and nectar plants, native bird plants,
 etc.
- Oregon Flora Project website (OSU). Detailed plant information for native Oregon species.
- <u>eBird</u> (Cornell Lab of Ornithology) website has a search function for local bird records.

Trail Siting and Design

- <u>Universal Access Trails and Shared Use Paths</u> (Larry Knutson and Debra Wolf Goldstein Penn Trails, 2014).
 This manual reviews Best Management Practices ("BMPs") to utilize when planning, designing, constructing, and maintaining pedestrian trails for universal accessibility—for providing trails usable by all people, to the greatest extent possible, without separate or segregated access for people with disabilities.
- <u>Green Infrastructure and Health Guide</u> (Oregon Health and Outdoor Initiative, 2018). Includes connection between nature and public health, green infrastructure siting and design guidelines, and ways to evaluate health benefits.
- <u>Trail-Building Toolbox</u> (Rails to Trails Conservancy). Guidance on trail design, materials, crossings, bridges, lighting, signage, etc.
- Designing and Building Sustainable Trails (International Mountain Bike Association).
- American Trails Resource Library. Compilation of articles and studies with topic search function.
- <u>USDA Forest Service Standard Trail Plans and Specifications</u> (USFW)

Corvallis Area and Open Space Plans and Reports

- Jackson-Frazier Wetland Management Plan (2005) Course folder
- Owens Farm Open Space Master Plan (2004) Course folder
- Owens Farm Restoration and Management Plan (2005) Course folder
- <u>Knotts-Owens Farm and Sunnyside School</u> page from Friends of Corvallis Parks and Recreation web site.
- Sunnyside School page from Restore Oregon web site.

Map Resources

- <u>General Land Office Maps</u> Historical Maps Digital Copies of the Cadastral Survey Maps for Oregon, produced by the General Land Office in the 19th and 20th centuries.
- *University of Oregon Map Library*. Variety of map resources and historical aerial photos.
- <u>City of Corvallis Maps and Map Data</u>. Map viewer, PDF maps, and GIS data for Corvallis.
- Benton County Maps. Map viewer, PDF maps, and GIS data for Benton County.
- <u>USGS Historical Topographic Map Explorer</u>. Downloadable USGS maps from various eras.

Historical Photos and Resources

• Historical Archives of Oregon Newspapers (University of Oregon Library). Search function by name or topic.