LA 408/508

**Synthetic Landscapes:**
Detailing Vegetated Roofs and Landscapes on Structure

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<tr>
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<td>12:00 pm - 1:50 pm</td>
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| Location      | Lawrence Hall, Room 222 |

| Credits | 4 |

<table>
<thead>
<tr>
<th>Instructor</th>
<th>Michael Geffel</th>
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<tbody>
<tr>
<td></td>
<td>Department of Landscape Architecture</td>
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<tr>
<td></td>
<td>Lawrence Hall, Room 209</td>
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<td></td>
<td><a href="mailto:mgeffel@uoregon.edu">mgeffel@uoregon.edu</a></td>
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**Course Description**

Over the last two decades, vegetated roofs have been a growing market sector in landscape architecture as municipalities and developers seek to mitigate the environmental impacts of new construction and add landscape amenities in dense urban environments. Their benefits are diverse and well-known, with various incentives subsidizing their construction based on the ecological concerns of the region where they are installed. With this growth in popularity has come a standardization of the industry, allowing for easier – albeit more generic – design and construction. But beyond these “off the shelf” products, landscapes on structure are highly technical, synthetic and site-specific; where landscape becomes its most architectural.
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As a point of departure, students will study industry standards and critique pre-packaged “green roof” systems while drawing their own designs for a local building. Through weekly drawing exercises, the designs will be developed at finer and finer scales to reveal the complexity of these landscapes. Planting will be covered – as will walls, earthworks, paving, waterproofing, furnishings, drainage, and maintenance. By the end of the term, each student will have a unique set of details to represent how their landscape is constructed – and how it functions in relation to the structure below.

Eligibility
This seminar is open to all upperclass undergraduate students (junior year and above) and all graduate students at the School of Architecture and Environment.

Prerequisites
none

Class Format
Class meeting times will be organized around presentations and detail workshops. Outside of class time, students are required to review readings, research selected topics and case studies, and complete assigned projects.

Learning Objectives
By the end of this course, you will have:
1. Become familiar with the industry standards and design context of landscapes on structure.
2. Researched and presented on the essential components of roof systems, and important case studies to the field.
3. Detailed and represented a landscape on structure for a local building.

Readings
There is no required textbook for this class. Readings will be provided digitally on Canvas.

Grading
This class may be taken for a letter grade or Pass/No Pass. Please consult your departmental curricular requirements regarding classes that may be taken Pass/No Pass.

Assessment
10% Attendance + discussion participation
20% Case Study Presentation
20% Research Topic Presentation
50% Landscape Design, Details and Rendering
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Expectations
Highest professional standards will be expected and maintained throughout the term. Active in-class participation and progress is very important. Participation will include research, preparation for class activities, respecting the rights and property of others, working cooperatively with other students as needed, and completing assignments satisfactorily and on time.

Attendance Policy
Students are expected to attend class for the full time allotted. Students may miss one class during the quarter, no questions asked (out of courtesy, a prior notification is very appreciated).

Absences beyond that allowed in this policy will require prior approval (only for things like medical emergencies, family bereavement, etc.); absences beyond that allowed in this policy without prior approval may result in failing the class.

Deadlines, Extensions, Incompletes
Assignments are due on or before the beginning of the class period of their due dates, unless otherwise noted. Late assignments are automatically penalized 10% per day, including weekends and holidays. Assignments not submitted after 10 days earn 0 points for the assignment. Exceptions to these policies are rare and must be arranged well before the deadline; email the instructor as soon as you can if anything may prevent you from meeting a deadline as scheduled.

Retaining Copies of All Coursework
Please retain copies of all work submitted and the original copy of all work returned to you during the term until the final course grade has been posted. In the event of any question concerning whether grades have been accurately recorded, it is your responsibility to provide these copies as documentation.

Classroom Courtesy
Please have your cell phone set to silent during class time. You are welcome to take notes on your laptop provided it does not become a barrier to your and your classmates’ active listening and discussion participation.

Academic Resources
The University’s Teaching and Learning Center (TLC) provides various programs, workshops, courses, tutors, and mentors to aid you in your coursework at the University of Oregon. One of the services that may be of particular benefit for this class is the TLC’s Writing Lab, which provides one-on-one feedback on writing assignments. You may visit the Drop-In Writing Lab at 72 Prince Lucien Campbell, M-F 9am-4pm, with or without an appointment (http://tlc.uoregon.edu/subjects-writing/).
Academic Integrity

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 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. Additional information about a common form of academic misconduct, plagiarism, is available at http://library.uoregon.edu/guides/plagiarism/students/index.html.

Accessibility

The University of Oregon is working to create inclusive learning environments. Please notify the instructor if there are aspects of the instruction or design of this course that result in disability-related barriers to your participation. You are also encouraged to contact the Accessible Education Center (formerly Disability Services) in 164 Oregon Hall at 541-346-1155 or uoaec@uoregon.edu.

Diversity

The University of Oregon is dedicated to the principles of equal opportunity and freedom from unfair discrimination for all members of the university community and an acceptance of true diversity as an affirmation of individual identity within a welcoming community. This course is committed to upholding these principles by encouraging the exploration, engagement, and expression of distinct perspectives and diverse identities. We will value each class member’s experiences and contributions and communicate disagreements respectfully. Please notify me if you feel aspects of the course undermine these principles in any way. You may also notify the Department of Landscape Architecture at 541.346.3634 or at landarch@uoregon.edu. For additional assistance and resources, you are also encouraged to contact the following campus services:

Office of Equity and Inclusion
1 Johnson Hall
541.346.3175
http://oied.uoregon.edu
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Center on Diversity and Community
54 Susan Campbell Hall
541.346.3212
http://codac.uoregon.edu

Bias Response Team
164 Oregon Hall
541.346.1134
brt@uoregon.edu
http://bias.uoregon.edu

Sexual Violence and Survivor Support Statement
The UO is committed to providing an environment free of all forms of discrimination and sexual harassment, including sexual assault, domestic and dating violence and gender-based stalking. If you (or someone you know) has experienced or experiences gender-based violence (intimate partner violence, attempted or completed sexual assault, harassment, coercion, stalking, etc.), know that you are not alone. UO has staff members trained to support survivors in navigating campus life, accessing health and counseling services, providing academic and housing accommodations, helping with legal protective orders, and more.

Schedule
In the event of inclement weather, the UO home webpage (http://www.uoregon.edu/) will include a banner at the top of the page displaying information about delay, cancellation or closure decisions for the Eugene campus. Additionally the UO Alerts blog will be updated with the latest updates and bulletins. Local television and radio stations will also broadcast delay and cancellation information.

Inclement Weather
Faculty members not able to travel to campus to convene their classes have the responsibility of notifying students in a timely way if their classes will be cancelled. In the event of a class cancellation, for any reason, the instructor will contact the Department of Landscape Architecture as the first point of contact, and also send an email via Canvas to all students.

Emergency Information
In Case of Emergency CALL 911.

In case of non-emergency assistance:
Call the UO Police Department at 541.346.2919

If we need to evacuate the building during class, two possible evacuation routes include exiting LA 222 and a) taking the building’s southeast stairs to the ground floor, and then exiting through the side (southeast) entrance of Lawrence
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Hall, or b) taking the building’s main (central) stairs to the ground floor, and then exiting through the front (south) entrance of Lawrence Hall.

If we need to evacuate the building during class, our designated assembly point is on the Old Quad, located west of Lawrence Hall.

Be sure your cell phone is set up to receive UO Alert text messages: 1) Login to DuckWeb, 2) Click on the “Personal Information” menu, and 3) Click on “Enter/Update Emergency Alert Phone.”

More information on emergency preparedness can be found online: emc.uoregon.edu/content/resources-students
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## Schedule

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<thead>
<tr>
<th>Week</th>
<th>Tuesday</th>
<th>Thursday</th>
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<tbody>
<tr>
<td>1</td>
<td>Introduction</td>
<td>Environmental Benefits/Constraints</td>
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<tr>
<td></td>
<td>Topic/Case Study Assignments</td>
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<tr>
<td>2</td>
<td>Systems Overview 1</td>
<td>Systems Overview 2</td>
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<tr>
<td>3</td>
<td>Structural Overview</td>
<td>Roof Design PINUP</td>
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<tr>
<td>4</td>
<td>Planting</td>
<td>Plant Stabilization</td>
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<td>5</td>
<td>Manufactured Soils</td>
<td>Earthworks &amp; Geofoam</td>
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<tr>
<td>6</td>
<td>Walls</td>
<td>Paving</td>
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<td>7</td>
<td>Lighting &amp; Furnishing</td>
<td>Roof Design PINUP</td>
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<td>8</td>
<td>Drainage</td>
<td>Waterproofing &amp; Geotextiles</td>
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<td>9</td>
<td>Irrigation</td>
<td>Management &amp; Maintenance</td>
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<tr>
<td>10</td>
<td>Advanced Topics</td>
<td>Critiques of “Green Roofs”</td>
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<tr>
<td>11</td>
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<td>Roof Design Final Presentation</td>
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