LIVING LANDSCAPES

Winter 2019 • LA 337

Syllabus

Instructor:

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This thoughtfully designed commercial landscape at *The Collegian* (southwest corner of 18th and Alder) is dominated by plants native to the Eugene area, and requires no irrigation and very little on-going care. (Photo taken in May; the landscape changes dramatically from one season to the next, as do all native landscapes.)

The choice is ours: We can continue to design and maintain static, ecologically dysfunctional landscapes on "life support" that are arguably attractive, cost a great deal both to install and to maintain, and provide very few environmental benefits—or . . . we can create and care for dynamic landscapes that "support life," are pleasing to the eye, cost very little to care for, and provide a host of environmental benefits.

Course description:

Contemporary landscapes on both residential and commercial properties cost far more—in money, labor, fuel, and loss of natural habitat—than more nature-friendly approaches to landscape design and maintenance. In this class, students acquire an understanding of how we got where we are, and learn about how to design and care for more environmentally responsible and life-affirming landscapes.

The ten-week course consists of lectures on Mondays (1000-1050) followed either by a walk on or near campus (1100-1150), or a discussion of that day's reading assignment. Most of the two-hour Wednesday sessions (1000-1150) will be devoted to near-campus and off-campus field trips to examine existing landscapes—the good, the bad, and the so-so. Plus, there are three half-day field trips on Saturdays from 1-5 pm on 19 January, 2 February, and 16 February. Field trips away from the campus area will be either by Lane Transit District bus or by university van.

At the completion of the course, students will:

- Understand the goals of conventional landscape design—and what those landscapes require in order to maintain them
- Be able to describe the structure, composition, and function of each of Eugene's three major habitat types and be familiar with its three major soil types
- Understand the importance of designing dynamic, ecologically vibrant landscapes, and how these landscapes change—and are cared for—through time
- Be familiar with both the pros and cons of using native and non-native plants
- Understand basic design principles and how these are applied in both conventional and more naturefriendly landscapes
- Be familiar with how one might transform a conventional landscape into a more nature-friendly one, without starting from scratch
- Be able to "make the case" to a family member, friend, neighbor, or client for landscapes that are more life-affirming
- Know some of the alternatives to mowed lawns and to bark-mulch-covered shrub beds

What to bring (or not) to class:

It's winter now in western Oregon, and although there are plenty of dry days during a typical winter, there are always some wet ones, as well. Since much of this class takes place outside, you need to be able to take notes in the rain. You may find it helpful to use Rite-in-the-Rain notebooks, which are available in the basement portion of the UO Duckstore at 13th and Kincaid.

Please bring to *every* class a folding umbrella and/or rain gear and an extra sweater, so you'll stay warm and dry and happy when we go outside—one cannot depend on weather forecasts. You might also find useful a sit-upon— a square piece of insulite (or similar) 12"-18" on a side that keeps your rear end warm, dry, and clean when sitting down outdoors.

Open lap-top computers are **not** permitted in the classroom. And mobile phones and all other electronic devices must be turned off and put away (so you're not even tempted to use them) during both the inside **and** the outside portions of the class. Any device being used during class time—except for taking photos outside, of sites we visit— will be politely taken from you, and then returned at the end of the class period.

Out of consideration for your fellow students—and in line with university policy—smoking is not permitted anytime during the outdoors portion of the class, including the off-campus field trips

Grading:

Grades for this course will be based on two essays, three quizzes, participation, field trip attendance, and a term project. *All work must be original and all sources acknowledged—the penalties for cheating and plagiarizing are severe and can include expulsion from the university*. A paper copy of each assignment will be handed in at the beginning of the class period on the day it is due. Late work (which may be emailed) will be penalized one grade (10%) for each day it is late. For example, if you turn in a 150-point essay two days late, the most points you can get—if the essay is absolutely perfect—is 120 points (150 minus 15 minus 15).

Grades will be calculated as follows:

| | Essay #1 (The Problem) Essay #2 (The Solution) Three quizzes @ 100 points each Participation (readings) Field trip attendance Term project | | | | 150 points | | |
|----|---|----|--------|----|--|------|--------|
| | | | | | 150 points 300 points 50 points 100 points <u>250 points</u> | | |
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| | | | | | 1,000 points t | otal | |
| | | | | | | | |
| A+ | 98-100% | B+ | 88-90% | C+ | 78-80% | D+ | 68-70% |
| A | 92-98% | В | 82-88% | С | 72-78% | D | 62-68% |
| A- | 90-92% | B- | 80-82% | C- | 70-72% | D- | 60-62% |
| | | | | | | | |

Pass/no-pass: Undergraduate students must have a C-minus or better to pass a class; graduate students must have a B-minus or better.

Attendance:

Since much of what you are likely to take from this class is "experiential" and cannot be acquired from books or on-line materials or borrowed notes, it is essential that you attend every class. But because unanticipated events may arise during the term (e.g., illness, a death in the family, a conflicting activity), each student is permitted **one excused absence** from any of the two-hour class meetings—if the student contacts the instructor in writing (email), preferably before the absence—and one **unexcused** absence from any of the two-hour class meetings.

Any additional absences from the two-hour class meetings will result in a deduction of 25 points from your termend total.

Participation and field trips:

This is a fairly small class—with a maximum of 20 students—so we can comfortably discuss the assigned readings and other topics that come up during the course of the term. At the beginning of each class for which there are assigned readings, each student will turn in a list of what she/he considers to be five major points covered in that day's readings. Each list will be worth 10 points, for a term total of 50 points.

Students are required to attend *two* of the three half-day Saturday field trips—each of which is worth 50 points but attendance is strongly encouraged for all three field trips.

Readings:

You will not be required to purchase a single book for this class—hooray! But you will need to buy a small Course Packet of useful information that supplements, but does not substitute for, lecture and field trip material. And there will be weekly handouts, most of which will also be posted on Canvas, for your convenience.

The rest of the readings for this class will be drawn from the following six works, excerpts of which will be available on Canvas:

- Noah's Garden: Restoring the Ecology of Our Own Back Yards, book by Sara Stein (1993)
- Design with Nature, book by Ian McHarg (1992)
- The Lawn: A History of an American Obsession, book by Virginia Scott Jenkins (1994)
- We Don't Garden Right, article by Sara Stein (1995)
- Bringing Nature Home: How Native Plants Sustain Wildlife in Our Gardens, book by Douglas W. Tallamy (2007)

• The Living Landscape: Designing for Beauty and Biodiversity in the Home Garden, book by Rick Darke and Douglas Tallamy (2014)

Essay #1 (The Problem):

Visit the Matthew Knight Arena on the east edge of campus and find a comfortable spot outside where you can sit for 30 minutes and observe your surroundings. Try to pick a spot that includes a lot of plants rather than one that is mostly "hardscape" of concrete, etc. Then answer the following questions:

- Do you feel comfortable during your visit?
- What does the plant "palette"—number of different species (you don't need to be able to identify them) and type of plants (herbaceous, shrub, tree)—consist of, and how are the plants arranged in the landscape?
- What do you think is required to maintain this landscape—amount of water, fertilizer, time, money, fossil fuel—and what skill-level do you think is required of the workers who maintain the landscape?
- Do you find this site attractive?
- How do other visitors interact with this landscape?

Now, pick a relatively dry morning or afternoon and visit the riparian (riverside) woodlands near the north end of the Frohnmayer ("Autzen") footbridge across the Willamette River from campus. Choose an area that is at least a little bit away from the bike path, but within 200 yards east (upriver) or west (downriver) of the footbridge. Again, sit down for 30 minutes and answer the same set of questions.

Then, in a double-spaced essay (approximately 1,000 words; please use a 12-point font) with a title of your own choosing:

- Compare the two sites and your impressions of the "landscapes" you observed.
- You might proceed question-by-question for each site, or you could choose a different approach for comparing the two places.

Essay #2 (The Solution):

After seven weeks or so of class, you've been exposed at some length to the environmental drawbacks of conventional landscapes, as well as to some of the advantages of choosing a more light-handed and nature-friendly approach. But there are many barriers to implementing change—if in fact landscape design professionals, as well as our culture as a whole, consider the changes discussed in this class desirable. In a double-spaced essay of approximately 1,000 words—please use a 12-point font—describe first what *some* of those barriers are, in your opinion; and then, second, choose the *one* barrier you consider to be the most important and suggest some ways for overcoming that particular barrier and gaining acceptance for more environmental-friendly landscaping in general.

Term project:

By the second half of the quarter, you will be familiar with "The White House Memo" as well as with a variety of approaches for creating and maintaining landscapes that **give** (in environmental benefits) more than they **take** from the environment (e.g., water; fertilizer; fossil fuel; lost or degraded wildlife habitat). By applying the criteria listed in The Memo, as well as what you've learned in this course, you'll be designing a nature-friendly landscape for a small part of campus—details to be announced later in the term.

You will work in teams of 3-4 students. On a base plan of the existing site (which will be provided for you) you will propose new plantings that will *contribute to* the upper Willamette Valley's natural landscape—rather than *detract from* that landscape—and you will also provide general guidelines for caring for the new landscape, both during the establishment period as well as over time, as the landscape is permitted to evolve and mature. Your group will then make a brief presentation of its plan to the rest of the class.

Keeping in touch:

I make every effort to be accessible to my students, but—believe it or not—I do not have internet service (nor access to email) right in my office, nor do I carry with me any electronic devices. Nonetheless, I get to a computer once or twice a day to check my email. If I receive an email from you, I will respond yet that day or, at the latest, by the following day. (I hope that you, too, will respond to any email from me within a reasonably brief period of time.) Please remember, too, that your emails to your teacher are a form of professional communication, so you need to avoid using slang or any expressions that might be considered in bad taste. (E.g., "Hello Whitey" or just "Whitey" is a suitable salutation; "Hey Whitey" is not.) And just as in your essays, watch your spelling and punctuation—and use paragraphs, preferably short ones.

In this course, starting the fourth week of the term, I meet personally with every student in the class for 15-30 minutes. Students need to contact me via email and we'll make arrangements to get together. I'm available every weekday except Thursday—which is my peace-and-quiet day in the forests of the West Cascades, away from all electronic devices and "city thoughts."

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Course Outline

Week One: How did we get here?

- A brief history of humanity, horticulture, and landscape design
- Conventional versus ecosystem approaches to gardening
- Why and how contemporary landscapes fail

Week Two: There's only one Willamette Valley

- Habitat types of the upper Willamette Valley
- Uniqueness of local landscapes

Week Three: Soils, fertility, and drainage

- Eugene's three major soil types
- Plant "food" and nutrients
- Working with existing drainage versus altering site drainage

Week Four: Native and non-native plants

- The pros and cons of each
- Can't they ever get along with each other?

Week Five: Lawns, groundcovers, and mulches

- How does nature cover the ground?
- Evolution of The Lawn
- On-site versus hauled-in mulches

Week Six: Accommodating other creatures—in addition to humans

- Creating a home for others (reptiles, amphibians, birds, insects, fungi, and many more)
- Basic habitat requirements for all creatures

Week Seven: Nature's Design Principles

- Harmony, unity, and balance—and how to use these in created landscapes
- Alternatives to plants arranged in straight lines and evenly spaced, one from the other

Week Eight: Maintenance issues

- Supplemental irrigation (or not)
- Weeds and on-site compost
- Use of machinery

Week Nine: Developing a nature-friendly landscape

- Establishment period and on-going care
- Adapting to or manipulating long-term site changes
- Our jobs as "orchestra leaders" in the landscape, not dictators

Week Ten: Where do we go from here?

• How to move ourselves—and our clients—away from conventional landscaping, toward ecologically functional landscapes where nature does most of the work...for free!

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Calendar

| <u>Monday, 07 January</u> | <u>Wednesday, 09 January</u> | | |
|---|--|--|--|
| Lecture: How did we get here? | CAMPUS WALK | | |
| CAMPUS WALK | | | |
| Monday, 14 January | Wednesday, 17 January | | |
| Lecture: There's only one Willamette Valley | CAMPUS WALK | | |
| Discussion of assigned reading | Essay #1 due | | |
| [McHarg] | | | |
| | <u>Monday, 07 January</u> Lecture: How did we get here? CAMPUS WALK <u>Monday, 14 January</u> Lecture: There's only one Willamette Valley Discussion of assigned reading [McHarg] | | |

FIELD TRIP #1: Saturday, 19 January (1-5 pm): Instruction Manual for Eugene's Class A Soils

Week 3 Monday, 21 January

NO CLASS (holiday)

Week 4 <u>Monday, 28 January</u> Lecture: Native and non-native plants Discussion of **assigned reading** [Stein article + Stein, Chapter 1] Student/instructor visits begin this week Wednesday, 23 January Lecture: Soils, fertility, and drainage CAMPUS WALK

Wednesday, 30 January Quiz #1 (take-home; covers Weeks 1-3) Visit Lane Community College

(calendar continues on other side)



A typical residence in Eugene—or almost anywhere in the U.S. Its "life-denying" landscape—as opposed to a "life-affirming" landscape—includes an irrigated and mowed lawn; foundation plantings of non-native and almost exclusively evergreen plants; bark-mulch-covered shrub beds; no leaf litter; and severely pruned shrubs. (*Compare with the photo on the cover of this course packet*.)

FIELD TRIP #2: Saturday, 02 February (1-5 pm): Instruction Manual for Eugene's Class B Soils

| Week 5 | Monday, 04 February Lecture: Lawns, groundcovers, and mulches CAMPUS WALK | Wednesday, 06 February Visit South Eugene High School area |
|--------|--|---|
| Week 6 | <u>Monday, 11 February</u> Lecture: Accommodating other creatures Discussion of assigned reading [Jenkins + Darke & Tallamy] | Wednesday, 13 February Visit term project site |

FIELD TRIP #3: Saturday, 16 February (1-5 pm): Instruction Manual for Eugene's Class C Soils

| Week 7 | <u>Monday, 18 February</u> | Wednesday, 20 February |
|---------------|---|---------------------------------------|
| | Lecture: Nature's design principles | Quiz #2 (take-home; covers Weeks 4-6) |
| | CAMPUS WALK | To be announced |
| Week 8 | Monday, 25 February | Wednesday, 27 February |
| | Lecture: Maintenance issues | Visit Nectar Way site |
| | Discussion of assigned reading [Tallamy, Chapter 1 plus?] | Essay #2 due |
| Week 9 | Monday, 04 March | Wednesday, 06 March |
| | Lecture: Developing a nature-friendly landscape CAMPUS WALK | Near-campus site visits |
| Week 10 | Monday, 11 March | Wednesday, 13 March |
| | Lecture: Where do we go from here? | Term project presentations |
| | Discussion of assigned reading | |
| | [Stein, Chapter 13 + Tallamy, Chapter 14 & | |
| | Afterword] | |
| Week 11 | <u>Tuesday, 19 March</u> (10:15 a.m.) | |
| (Finals Week) | Quiz #3 (covers Weeks 7-10—may be take-home) | |