

SPRING 2018  
LA 328  
SYLLABUS

# SPRING PLANTS: PLANTS FOR ECOSYSTEM SERVICES



time	MW 10:00-11:50am, F 9:00-11:50am
location	Lawrence Hall room 231
credits	4
instructor	Kelly Densmore office: Lawrence Hall mezzanine 271, office hours by appointment email: <a href="mailto:kellyd@uoregon.edu">kellyd@uoregon.edu</a>
class description	<p><i>Spring plants seminar focuses on flowering plants, their identification and design use, and the ecosystem services they provide. It is open to all majors and may be taken as an independent class or as the third class in the Plants sequence. The course will weave together the threads of plant ID, plant care, plant selection, planting design and restoration. Plant identification focuses on flowering trees and shrubs, groundcovers and perennials, with the intention of understanding how flowering plants may be used in design to support both human needs and ecosystem functions. Sketchbook/Journal assignments will help students learn to identify plants via flower morphology and practice a series of short planting design investigations.</i></p> <p><i>Field Trips will introduce students to a variety of design scales with the underlying themes of four categories of ecosystem services:</i></p>

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- *Supporting services - such as soil formation and nutrient cycling;*
- *Provisioning services - including the food, fuel, fiber and medicines we collect from natural and managed ecosystems;*
- *Regulating services - stormwater management and climate regulation, carbon sequestration, and pollination;*
- *Cultural services - the beauty of the outdoors and the recreational, therapeutic, educational and spiritual roles of plants in human quality of life.*

### final project

The final project will be a fully developed planting plan practicing one of the themes we have covered in class or students may propose an independent study based on their major or studio project. Themes include but are not limited to stormwater gardens, phytoremediation, pollinator gardens, green roofs, color-based design, perennial edibles, or sustainability such as drought tolerant, native and native analogue for climate change, restoration.

### learning outcomes

Upon completion of the course with a satisfactory grade, students will be able to:

- correctly identify and name around 150 plants
- understand how flowers and fruit help distinguish plant families
- apply basic color theory to planting designs
- evaluate plant combinations and correct poor combinations
- design a space that celebrates/enhances/explores one or more of the ecosystems services categories
- produce a seasonally balanced plant list and a fully labeled planting plan

### required readings

Phyto: Principles and Resources for Site Remediation and Landscape Design, Kate Kennen and Niall Kirkwood, Routledge, Taylor and Francis Group, 2015. (chapter 1 only) On reserve in UO Design Library.

“Emerging Landscapes: Using Ecological Theory to Guide Urban Planting Design: An adaptation strategy for climate change”, MaryCarol Hunter, Landscape Journal, Vol. 30, No. 2 (2011), pp. 173-193  
<http://www.jstor.org.libproxy.uoregon.edu/stable/pdf/43324373.pdf>

“Urban birds and planting design: strategies for incorporating ecological goals into residential landscapes”, Josh Cerra and Rhiannon Crain, Urban Ecosystems: Salzburg Vol. 19, Iss. 4, (Dec 2016): pp. 1823-1846.  
[https://search-proquest-com.libproxy.uoregon.edu/docview/1849312508?accountid=14698&rfr\\_id=info%3Axri%2F-sid%3Aprimo](https://search-proquest-com.libproxy.uoregon.edu/docview/1849312508?accountid=14698&rfr_id=info%3Axri%2F-sid%3Aprimo)

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Green Infrastructure for Landscape Planning : Integrating Human and Natural Systems, Gary Austin, Hoboken: Taylor and Francis, 2014  
(chapter 4 only)

<https://ebookcentral.proquest.com/lib/uoregon/reader.action?docID=1600508&query=>

## tentative schedule

Monday		Wednesday		Friday	
4/2	introduction + plants	4	Reading Summary (Green Infrastructure) + plants	6	Lecture Flower Morphology Color Theory
9	plants Journal 1 review	11	Pollinator mini-talk + plants	13	Guest Lecture / Panel Planting Design Theory
16	<b>Test #1</b>	18	Reading Summary (Emerging Landscapes) + plants	20	Field Trip Restoration Project
23	plants Journal 2 review	25	Phytoremediation mini + plants	27	Field Trip Stormwater
30	<b>Review design proposals and preliminary plant lists</b>	5/2	Reading Summary (Urban Birds & Plant Des.) + plants	4	Planting Plan Mechanics + Residential Design Tour
7	<b>Test #2</b>	9	Reading Summary (Phyto Chapter 1) + plants	11	Guest Lecture + Field Trip Green Roofs
14	plants Journal 3 review	16	plants	18	<b>Planting Plan Review</b>
21	Arborist, <i>Phil Carroll</i> or <i>Michelle Parkins</i>	23	Climate Resilience mini + plants	25	Field Trip Grassroots Garden
28	NO CLASS MEMORIAL DAY HOLIDAY	30	<b>Test #3</b>	6/1	Field Trip West Eugene Wetlands Journal 4 Due
4	R E V I E W W E E K , N O C L A S S				

Note: Field trips subject to change. Check your email prior to departing for meeting location.

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**grades** Grades will be based on the best three out of four tests (300 points), a two-part planting design exercise (120 pts combined), four journal assignments (80 pts), written reading responses (40 pts), and field trip attendance (5 pts/ea = 25 pts). Test scores must average 65 or better to pass the class. The grading scale is unusual because the heavy focus is on planting design rather than testing knowledge.

The grading scale is:

100 %= A+	90-91= B+	81-82= C+	72-73= D+
94-99= A	85-89= B	76-80= C	67-71= D
92-93= A-	83-84= B-	74-75= C-	65-66= D-
64 and below= NP			

**supplies** Recommended supplies:  
'Prismacolor' colored pencils, 'Rite in the Rain' all-weather writing paper, 5x/10x hand lens, approximately 8.5x11" sketchbook. All of these items may be purchased at the bookstore.

**books** Required books:  
Spring Plants Reader, compiled by Ann Bettman and Arica Duhrkoop-Galas  
Plants of the Pacific Northwest Coast, Pojar and Mackinnon

Recommended books:

Several books have been ordered for Spring term and are available at the bookstore. They are all optional, but we feel they would be particularly helpful to this class and your design work. Select which books you might buy based on your own personal focus and ask if you need guidance. Out of print books may be found online.

Herbaceous Perennial Plants, Armitage

Flower Finder, A guide to identification of spring wildflowers and flower families, Thielguard Watts.

Planting Design Handbook, Second edition, Robinson

Designing with Plants, Oudolf and Kingsbury

Landscape Graphics, Reid

The California Wildlife Habitat Garden, Bauer

Pocket Guide to Ornamental Grasses, Darke

The Encyclopedia of Grasses for Livable Landscapes, Darke

Field Guide to Trees of North America, Kershner for National Wildlife Federation

The Sibley Guide to Trees, Sibley

Trees for Green Streets, Portland Metro

Flora of Oregon, Meyers, Jaster, Mitchell, Hardison, Eds.

Planting Green Roofs and Living Walls, Dunnett and Kingsbury

Phyto, Kate Kennen and Niall Kirkwood