

# SPRING PLANTS: PLANTS FOR ECOSYSTEM SERVICES



time MWF 10:15-11:45am

location Lawrence Hall room 222

credits 4

instructor Kelly Densmore  
office: Lawrence Hall mezzanine 271, office hours by appointment  
email: [kellyd@uoregon.edu](mailto:kellyd@uoregon.edu)

class description *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.*

*Remote lectures and self-guided and/or in-person field trips will introduce students to a variety of design scales with the underlying themes of four categories of ecosystem services:*

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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 120 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

Green Infrastructure for Landscape Planning : Integrating Human and Natural Systems, Gary Austin, Hoboken: Taylor and Francis, 2014 (chapter 4 only). Available through UO Library Proxy Server at <https://ebookcentral.proquest.com/lib/uoregon/reader.action?docID=1600508&query=>

“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>

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.

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required readings  
continued

“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)

tentative schedule

\*subject to change, refer to Canvas and instructor emails

Monday (in-person, outside)		Wednesday (remote/TBA)		Friday (remote/TBA Field Trip)	
3/29	introduction + plants	31	Reading Summary (Green Infrastructure) + plants	4/2	Lecture Flower Morphology Color Theory
5	plants Journal 1 review	7	Pollinator mini-talk + plants	9	Planting Design Theory
12	<b>Test #1</b>	14	Reading Summary (Emerging Landscapes) + plants	16	Planting Plan Mechanics + Residential
19	plants Journal 2 review	21	Phytoremediation mini + plants	23	Stormwater
26	<b>Review design proposals and preliminary plant lists</b>	28	Reading Summary (Urban Birds & Plant Des.) + plants	30	Restoration Project
5/3	<b>Test #2</b>	5	Reading Summary (Phyto Chapter 1) + plants	7	Green roofs
10	plants Journal 3 review	12	plants	14	<b>Planting Plan Review</b>
17	Arborist, <i>Phil Carroll</i> or Michelle Parkins	19	Climate Resilience mini + plants	21	Agriculture/ Grassroots Garden Journal 4 review
24	plants	26	<b>Test #3</b>	28	West Eugene Wetlands
31	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. Students are responsible for getting to location; no van transportation will be provided. Field trips allow for travel time and conclude in allotted Friday class time.

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grades Grading is based on percent achievement of 565 total points possible: 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. Grading rubrics for each assignment to be provided in course packet along with assignment detail. 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, for use during class and to complete assignments:  
Spring Plants Reader, compiled by Ann Bettman and Arica-Duhrkoop-Galas  
Plants of the Pacific Northwest Coast, Pojar and Mackinnon  
*Both of these items may be purchased at the bookstore.*

Recommended books, for use as additional resources:  
*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

# SPRING PLANTS: PLANTS FOR ECOSYSTEM SERVICES

## disabilities

### Students With Disabilities

If you have a documented disability and anticipate needing accommodations in this course, please make arrangements to meet with one of us soon. Please request that the Counselor for Students with Disabilities send a letter verifying your disability.

## expectations

### Academic Honesty Policy

All work submitted should be your own and originally produced for this course. While there will be times when students are encouraged to work together and assist one another, each student is expected to complete his or her own work individually. Violations will be taken seriously and are noted on disciplinary records.

Highest professional standards will be expected and maintained throughout the term. Active in-class participation and progress is very important and is part of a passing grade. This includes research, preparation for and participation in class activities, respecting the rights and property of others, working cooperatively with other students, and completing assignments on time.

## attendance policy

Students are expected to attend each session for the full time allotted. Absences beyond that allowed in this policy will require prior approval (only for things like medical emergencies, family bereavement, etc.); Attendance is taken on field trips, and points will be lost for any absences.

## deadlines

Projects are due on or before the beginning of the class period of listed due dates, unless otherwise noted. Email the instructor as soon as you can if anything may prevent you from meeting a deadline as scheduled.

## 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. Please retain all work, both progress and final, in a digital format. The instructor will inform you when and how to submit this work for archiving during the course of the quarter.

## courtesy

Please set your cell phone on silent during class time. You are welcome to use your smartphone for research purposes provided it does not become a barrier or distraction to your and your classmates' education or the ability of the instructor to teach.

## 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.

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### academic integrity

The University Student Conduct Code (available at [conduct.uoregon.edu](http://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 complete their own work and not give or receive unauthorized help on assignments 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 with integrity. 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 me 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](mailto:uoaec@uoregon.edu).

### diversity and equity

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](mailto: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>

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](mailto:brt@uoregon.edu), <http://bias.uoregon.edu>