# MONTANA STATE UNIVERSITY | HORT 432: ADVANCED LANDSCAPE DESIGN SYLLABUS, FALL 2016

Class Schedule: Monday 1:10 – 3:00 PM, Wednesday 1:10 – 4:00 PM, Friday 1:10 – 3 00 PM Location: Linfield Hall 16 (studio), Linfield Hall 232 (computer lab) Prerequisites: HORT 331, HORT 335, HORT 336; or instructor consent 4 undergraduate credits

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# OVERVIEW

This course serves as the capstone studio course for the Landscape Design major. We will focus on site master planning and design that generates ecological and cultural value. Throughout the semester, you will be challenged to integrate the suite of skills acquired in other core courses, including graphics, site engineering, planting design, and construction. In the first part of the course, we will build *understanding* of landscape performance principles and tools through critical examination of lecture and reading materials and field experiences. The primary part of the course will involve *application* of this newly acquired knowledge and skills in a service-learning design project. Through this client-based experience, you will continue to advance your *communication and professional* skills through stakeholder outreach, landscape representation, and verbal and technical written presentation.

## LEARNING OBJECTIVES

- Gain an understanding of the principles and processes for measuring value of landscape performance in order to develop sustainable site designs.
- Critically analyze the life cycle of and resources used to design, construct, and manage landscapes.
- Develop skills in planning and design of landscapes at the site-scale, within the public realm.
- Fine-tune design process and unique graphic abilities to respond to and represent a project's environmental, economic, cultural, and aesthetic conditions.
- Apply landscape performance functions to design solutions that regenerate landscape benefits.
- Advance professional skills by working in a work-simulated studio environment, organizing stakeholder collaborations, and presenting design solutions.
- Build technical writing and professional work skills through service-learning activities.

## STUDIO STRUCTURE

## Module 1: Understanding

*Learning goal: Build knowledge of principles and considerations for investigating landscape performance. Critically analyze the life cycle and benefits of designing landscapes.* 

A variety of class activities will be incorporated by theme, including lectures, readings, reflection questions, and field experiences. Themes explored are vegetation & soil, water, materials & energy, and human health & well-being. Material will also include landscape performance fast facts, benefits toolkits,

and case studies, utilizing the Landscape Performance Series website. In Assignment 1 you will summarize research and learnings through infographics that represent local systems through time and space, as well as a written analysis.

#### **Module 2: Application**

Learning goal: Collaborate with project partners to develop design solutions that meet landscape performance goals.

We will be working with the City of Bozeman Water Conservation Division to develop landscape scenarios that will be precedents for how their new Planting and Outdoor Watering guidelines may be implemented by area property owners, as well as meet varying landscape performance goals. This module will follow a more traditional studio course format, with a combination of individual and group research, quick design exercises, iteration, desk critique, landscape performance calculations, and landscape representation.

## **Module 3: Communication**

Learning goal: Practice professional verbal and written communication of landscape performance and design goals and solutions.

During this module, you will share design solutions in a professional venue, with a broader stakeholder audience. The final assignment will focus on writing, to compliment the more visual-heavy public presentation of work. This technical writing challenge will provide a more in-depth analysis and rationale for design choices and landscape performance value.

#### ASSESSMENT

All assignments will be evaluated using a rubric based on course learning objectives.

Module	Assignments	Points	% Total
Participation &	Reflection Exercises (R1, R2, R3)	25 each	20
engagement	Engagement	125	
Understanding	Assignment 1 (A1): Performance Principles	200	20
Application	A2: Baseline Performance	100	
Landscape Design Scenarios	A3: Schematic Design Mid-Review	100	40
for Water Conservation in the Middle Rockies	A4: Design Performance	200	
Communication	A5: Sharing Solutions	150	20
	A6: Memo	50	
		1000 total	100

#### Grades

- B = Good, above expectations
- C = Average, acceptable, meets expectations

D = Marginally acceptable

F = Not acceptable

(A 93-100%, A- 90-92) (B+ 87-89%, B 83-86, B- 80-82) (C+ 77-79, C 73-76, C- 70-72) (D 60-69) (0-59)

## RESOURCES

## **Required Texts**

Venhaus, H. 2012. Designing the Sustainable Site: Integrated Design Strategies for Small-scale Sites and Residential Landscapes. John Wiley & Sons, Inc.: Hoboken, NJ.

## Recommended Supplementary Texts

- LaGro, J.A. Jr. 2013. Site Analysis: Informing Context-Sensitive and Sustainable Site Planning and Design. 3<sup>rd</sup> Ed. John Wiley & Sons, Inc.: Hoboken, NJ.
- Booth, Norman K. Basic Elements of Landscape Architectural Design

# Studio Reference Texts

- Calkins, M. 2012. The Sustainable Sites Handbook: A Complete Guide to the Principles, Strategies, and Best Practices for Sustainable Landscapes. John Wiley & Sons, Inc.: Hoboken, NJ.
- Dee, C. 2001. Form and Fabric in Landscape Architecture: a visual introduction. Routledge: New York, NY.
- Sustainable SITES Initiative. 2014. SITES v2: Reference Guide for Sustainable Land Design and Development. Lady Bird Johnson Wildflower Center of the University of Texas at Austin, the U.S. Botanic Garden, and the American Society of Landscape Architects.

## D2L Resources

Additional reading and research sources will be posted on course D2L site.

# (POLICIES)

The remaining syllabus topics, including studio culture, participation, academic misconduct, etc. have been omitted.