

LANDSCAPE CONSTRUCTION MANAGEMENT

HORT444 :: FALL2011 :: IOWASTATEUNIVERSITY :: *three credits*

INSTRUCTOR Lisa Orgler
Horticulture Hall 129, 294-6375 (Horticulture), lorgler@iastate.edu
Office Hours: Tuesday 9 to 11 a.m. or by appointment

LOCATION/TIME Lecture: Monday and Wednesday 11:00-11:50 a.m. (Location: Horticulture Hall 138)
Lab: Monday 2:10 to 5 p.m. (Location: Horticulture Hall 061)

TEXT Required Landscape Construction (3rd Edition) by David Sauter
Additional reading materials will be posted on Blackboard Learn or handed out in class

COURSE DESCRIPTION This course provides an overview of principles and practices of residential landscape construction. It encompasses business and project management, and landscape estimating and contracting, including estimating procedures. Laboratory work involves construction project management and installation.

You will be introduced to a variety of topics, including legal issues, site analysis, construction documentation, site prep, hardscape materials, bidding, estimating, project management and installation.

LEARNING OBJECTIVES Upon successful completion of this course you will be able to:

1. Understand the landscape construction process
 2. Interpret basic landscape construction documents and specifications
 3. Effectively communicate detailed landscape construction information through writing
 4. Differentiate construction materials currently available in the landscape industry
 5. Appraise environmental factors that affect landscape construction and long-term survivability, and how these can be modified at the time of construction
 6. Develop skill in different landscape construction techniques of hardscape installation
 7. Examine the various facets that comprise the business of landscape construction
 8. Practice the importance of working in a team
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PROFESSIONAL DEVELOPMENT

As professionals we are required to be on time, work in teams, and interact with others, both within the work environment and outside, in positive and constructive ways. Developing and practicing these skills of professionalism in HORT 444 will enhance your learning and performance in this class and in your career. Because of this importance to your current and future success, appropriate professional behaviors and work are expected for all class sessions.

Student behavior and interactions affect your learning as well as other students' learning. My expectations for you, as a student in HORT 444, include:

- Following classroom etiquette and civility requests
- Arriving on time - if you have a class on the other side of campus before our meeting times, please let me know
- Being respectful of students' learning needs
 - Examples of this include, but are not limited to:
 - avoiding side conversations during class
 - not reading the newspaper or other non-class related materials during class
 - turning off your cell phone while in class
- Following instructions carefully
- Planning ahead- complete and turn in all assignments on time
- All academic work is to comply with all policies on academic honesty as detailed in the Student Information Handbook and ISU Catalog.

As a student in HORT 444 this is what you can expect from me as your instructor:

- Working cooperatively with you to create a positive and effective learning environment
- Arriving prior to class and starting on time
- Respecting you as individuals and scholars
- Providing you clear and detailed instructions on assignments
- Providing ample opportunity for questions/clarifications related to assignments and class content
- Distributing assignments so adequate time is allowed for their completion
- Returning assignments in a reasonable timeframe with constructive comments if applicable

COURSE PROCEDURES

The course will consist of lectures, videos, in-class discussion, team activities and writing assignments. Lab will provide an opportunity for field trips and hands-on installation activities.

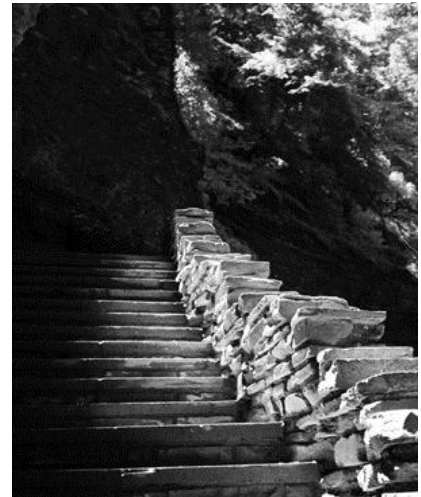
LAB SPECIFICS

The hands-on projects will center around installing or performing maintenance activities on small landscape projects. Since these projects will be outside, dress appropriately. Work boots or tough leather shoes are strongly recommended. Please don't show up in flip flops or the like. Also consider investing in a pair of work gloves. When we are on the project site, students are required to wear shirts and long pants at all times. These installation projects require you to do some physical work. Please come prepared to be an active participant in lab!



STUDENT EVALUATION

Readiness Assessment Tests	Points
Class RATs: Ten throughout semester worth 15 pts each (team-based)	150
Exam One	100
Exam Two	100
Final Exam	100
Writing Assignments & Lab Reports	
What's New in the Industry Paper & Presentation	50
Landscape Business Plan (team-based)	50
Estimating Exercise	30
MU Retaining Wall Lab Report	25
Forker Paving Lab Report	25
Arbor Lab Report	25
In-Class Exercises	
Calculation Problem Set	20
Reading construction documents	10
Topography Map Exercise	10
Gantt chart	10
In-Class Participation and Attendance	45
Total 750	



ASSIGNMENTS

All assignments are due at the **beginning** of the class period on the assigned due date.

Detailed information will be given for each assignment, when it is assigned. Be sure to read and follow the instructions. If you have questions---please ask! A 10% penalty will be deducted from the assignment for each day (including weekends and holidays) if it is late. (i.e. If the assignment isn't turned in at the **beginning** of the class period on the due date, 10% will be deducted.)

TEAMS

Team projects and Readiness Assessment Tests (RATs) will be given throughout the semester. Teams are encouraged to work together, learn from each other and have open discussions. A single team score will be assigned to each member contributing towards a RAT or team project. If you are absent the day of a RAT, you will not be able to earn a team score. Peer evaluations will be administered at least once during the semester. These evaluations will review individual contributions within each team.

GRADING POLICY

Total Points	Grade
698-750	A
675-697	A-
653-674	B+
622-652	B
600-621	B-
578-599	C+
548-577	C
525-547	C-
503-524	D+
473-502	D
450-472	D-
449 or below	F

Drop Policy

This follows university policy as stated in the current course catalog.

ADA policy

If you have a documented disability and anticipate needing accommodations in this course, please make arrangements to meet with me soon. Please request that a Disability Resources staff send a SAAR form verifying your disability and specifying the accommodation you will need. The Disability Resources (DR) office is located on the main floor of the Student Services Building, Room 1076 or call 515-294-6624.

HORT 444 TENTATIVE LECTURE/LAB SCHEDULE

Week	Date	Topic	Reading in Sauter	Assignments and Class Exercises
1	8/22	Course overview/The Detail of Beauty/Questionnaires		
	LAB 8/22	Team-Based Learning, Reiman Gardens Trip		RG hardscape exercise, RAT
	8/24	Construction Process, Landscape Construction Industry	Chapter 1	Construction Flowchart
2	8/29	Preconstruction: Construction documents	Chapter 3, 8	Reading construction documents exercise, RAT
	LAB 8/29	Preconstruction: Construction Documents, Layout and Measurement (Hort Farm)		Translating landscape plans to construction markings
	8/31	Preconstruction: legal Issues, contractor/client relationship, safety	Chapter 2	Assign "What's New in the Industry" paper, RAT
3	9/5	Labor Day (no class)		
	LAB 9/5	Labor Day (no class)		
	9/7	Preconstruction: math problems	Chapter 4	Calculation Problem Set
4	9/12	Site prep & grading, drainage and erosion control	Chapters 9, Section 3	Reading a topography map, RAT
	LAB 9/12	Field Trip: Rhino Materials (Des Moines) Chris Boyd, landscape representative		
	9/14	***EXAM ONE***		
5	9/19	Fences/free standing walls, retaining walls	Sections 5 & 8	
	LAB 9/19	Beginning Transit Work (Central Campus)		
	9/21	Review landscape projects, visit sites, team roles		RAT
6	9/26	Prepare for lab, finalize team roles		
	LAB 9/26	Landscape Project: MU Retaining Walls		
	9/28	Paving	Section 6	RAT
7	10/3	Wood structures	Section 7	RAT
	LAB 10/3	Landscape Project: MU Retaining Walls		
	10/5	Water features: Chris Thompson, Just Add Water	Chapter 34	What's New in the Industry paper due
8	10/10	What's New in the Industry Presentations		
	LAB 10/10	Landscape Project: MU Retaining Walls or Forker Paving		
	10/12	What's New in the Industry Presentations		
9	10/17	No class – Lisa giving presentation in Des Moines		
	LAB 10/17	Landscape Project: Forker Paving		
	10/19	Plant material: Inspection & installation: Jeff Iles	Section 10	

10	10/24	Preconstruction: Specification Manuals		Specification exercise MU Retaining Wall lab report due, RAT
	LAB 10/24	Landscape Project: Forker Paving		
	10/26	A study activity		
11	10/31	***EXAM TWO***		
	LAB 10/31	Work Scheduling: Dan Canova, Perennial Gardens (Ankeny)		
	11/2	Project Management: Jim Mason, Country Landscapes		Forker Paving lab report due
12	11/7	Project Management		Gantt chart exercise, RAT
	LAB 11/7	Bidding and Estimating: Ann Marie VanDerZanden	Chapter 5	RAT
	11/9	Bidding and Estimating: Jon Rudey, Midwest Groundcovers	Chapter 5	Assign estimating exercise
13	11/14	Case study: Rick Fox, Country Landscapes		Estimating exercise due Assign business plan project
	LAB 11/14	Panel Discussion on running a business: Jim Mason, Country Landscapes Weston Wunder, Landscapes by Design Tom Hughes, Hughes Nursery		Each group should prepare at least five questions
	11/16	Creating a business plan: Mike Upah, Pappajohn Center for Entrepreneurship		Company name and description due
14	Thanksgiving Break (11/21-11/25)			
15	11/28	Arbor Project overview and estimate: Joe Vanderzanden		
	LAB 11/28	Arbor Project : Joe VanDerZanden		
	11/30	Design, Construction & Maintenance		Landscape business plan due, informal discussion of plans
16	12/5	Panel Discussion on Maintenance: Les Lawson, ISU Campus Services Sarah Rummery, Reiman Gardens Jeremy Boka, Perficut Companies, Inc.		Each group should prepare at least five questions
	LAB 12/5	Arbor Project : Joe VanDerZanden		
	12/7	A study activity		Arbor Project lab report due
17	12/13	Final exam tentatively on Tues., Dec. 13 at 9:45 a.m.		