

Forestry 331
Landscape Maintenance and Arboriculture
Fall 2020

Text: Arboriculture: Integrated Management of Landscape Trees, Shrubs and Vines
4th Edition. Harris, Clark and Metheny. Prentice Hall

Course Learning Objectives

1. Develop an understanding of the principles behind an integrated approach to the management of urban landscapes, including;
 - water management
 - soil and nutrient management
 - insect/disease management
2. Develop an understanding of plant establishment and tree care techniques, including pruning, cabling, and lightning protection.
3. Develop an understanding of tree growth phases and how growth phase influences management activities.
4. Develop an understanding of how OSHA and the ANSI standards influence tree management in urban landscapes.
5. Develop an understanding of vegetation management practices in utility corridors.
6. Develop an understanding of how to efficiently manage urban landscapes, including work scheduling, price estimations, and work orders.

These learner objectives will be achieved through a combination of lectures/discussions, laboratory/field exercises, and outside reading assignments.

NOTE: POWERPOINT LECTURES ARE THE INTELLECTUAL PROPERTY OF DR. LES WERNER AND ARE NOT INTENDED FOR PERSONAL USE AND/OR DISTRIBUTION.

The Learner Outcomes associated with FOR 331 align with following Society of American Foresters accreditation competencies:

A. Ecology and Biology

- knowledge of tree physiology and the effects of climate, fire, pollutants, moisture, nutrients, genetics, insects and diseases on tree and forest health and productivity.

C. Management of Forest Resources

- an ability to develop, apply, and understand the effects of silvicultural prescriptions appropriate to management objectives, including methods of establishing and influencing the composition, growth, and quality of forests.

Student Expectations:

In this course you will be expected to complete the following types of tasks.

- communicate via email
- download and upload documents to Canvas
- read documents online
- view online videos
- complete quizzes/tests online
- perform lab exercises independently

Grading:

The course involves fieldwork therefore, lab attendance is mandatory. Your final grade will be based on 3 lecture exams and the lab exercises. The exams constitute 60% of your final grade (20% each) and the lab exercises constitute 40% of your final grade.

We will follow the University system of grading, including + and --.

90 – 100	A	The instructor reserves the right to adjust the grading scale downward.
80 – 89	B	
70 - 79	C	
60 - 69	D	
< 60	Failing	

Anti-Harassment Statement

The forestry discipline, following the lead of the Society of American Foresters which accredits the B.S. forestry degree, believes we all have a responsibility in creating a safe, inclusive, professional environment in all forestry-related activities and events. All forms of discrimination, harassment, and bullying are prohibited. This applies to all participants in all settings (online and in-person) and locations (on- and off-campus) where forestry classes and associated activities are conducted, including student organization events and activities, committee meetings, workshops, conferences, and other work and social functions where employees, volunteers, sponsors, vendors, or guests are present.

Discrimination is prejudicial treatment of individuals or groups of people based on their race, color, creed, religion, age, sex, sexual orientation, gender identity or expression, national origin, ethnicity, ancestry, disability, pregnancy, marital or parental status, veteran status, or any other category protected by law.

Sexual harassment is unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature that creates an intimidating, hostile, or offensive environment. Sexual harassment constitutes discrimination and is illegal under federal, state, and local laws.

Bullying is unwelcome, aggressive behavior involving the use of influence, threat, intimidation, ridicule, hazing or coercion to dominate others in the professional environment. Bullying behavior may go beyond characteristics protected by applicable laws, including but not limited to, political views, dress, or other outward physical appearances.

Other types of harassment include any verbal or physical conduct directed at individuals or groups of people because of their race, ethnicity, color, national origin, sex, sexual orientation, gender identity, age, religion, disability, veteran status, or any other characteristic protected by applicable laws, that creates an intimidating, hostile, or offensive environment.

The following list, while not exhaustive, includes examples of unacceptable behavior: slurs, jokes, threats, or derogatory comments relating to the characteristics noted above. Examples of inappropriate physical harassment that violate this statement include, but are not limited to: assault, unwanted touching, or impeding or blocking movement. In addition, no individual may be denied admission to, or participation in or the benefits of, any UWSP-associated events. Similarly, the display or circulation of derogatory or demeaning posters, cards, cartoons, emails, texts, videos, and graffiti which relate to characteristics noted above violate this statement.

Reporting

Students, staff, faculty, or guests associated with Forestry-related programming who experience or witness incidents of harassment are strongly encouraged to report the incident. The Forestry discipline strongly urges the prompt reporting of complaints or concerns so that rapid and constructive action can be taken.

Reporting can be done online or in person, to a faculty or staff member, and/or the UWSP Dean of Students. Anonymous reporting is available.

The UWSP Title IX Website is the home for all information related to harassment and discrimination, including reporting options, student and employee resources, and information about what happens after a report is submitted:

<https://www.uwsp.edu/titleix/Pages/default.aspx>

SOCIETY OF AMERICAN FORESTERS CODE OF ETHICS

Principles and Pledges

1. Foresters have a responsibility to manage land for both current and future generations. We pledge to practice and advocate management that will maintain the long-term capacity of the land to provide the variety of materials, uses, and values desired by landowners and society.
2. Society must respect forest landowners' rights and correspondingly, landowners have a land stewardship responsibility to society. We pledge to practice and advocate forest management in accordance with landowner objectives and professional standards, and to advise landowners of the consequences of deviating from such standards.
3. Sound science is the foundation of the forestry profession. We pledge to strive for continuous improvement of our methods and our personal knowledge and skills; to perform only those services for which we are qualified; and in the biological, physical, and social sciences to use the most appropriate data, methods, and technology.
4. Public policy related to forests must be based on both scientific principles and societal values. We pledge to use our knowledge and skills to help formulate sound forest policies and laws; to challenge and correct untrue statements about forestry; and to foster dialogue among foresters, other professionals, landowners, and the public regarding forest policies.
5. Honest and open communication, coupled with respect for information given in confidence, is essential to good service. We pledge to always present, to the best of our ability, accurate and complete information; to indicate on whose behalf any public statements are made; to fully disclose and resolve any existing or potential conflicts of interest; and to keep proprietary information confidential unless the appropriate person authorizes its disclosure.
6. Professional and civic behavior must be based on honesty, fairness, good will, and respect for the law. We pledge to conduct ourselves in a civil and dignified manner; to respect the

needs, contributions, and viewpoints of others; and to give due credit to others for their methods, ideas, or assistance.

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Date	Lecture Topic	Lab Topic
Week 1	Course Overview – What is a tree?	
Week 2	Tree Structure and Function	Tree Growth Form (Exercise 1)
Week 3	Tree Structure and Function	
Week 3	Pruning	Tree Injection (Exercise 2)
Week 4	Pruning	
Week 4	Pruning	Tree Pruning – Training Pruning
Week 5	Pruning	
Week 5	EXAM I	Independent Tree Pruning
Week 6	Tree Planting	
Week 6	Tree Planting	Independent Tree Pruning
Week 7	Structural Support Systems	
Week 7	Lightning Protection Systems	Tree Planting
Week 8	Utility Arboriculture	
Week 8	Utility Arboriculture	Utility Arboriculture (Exercise 3)
Week 9	Urban Soils	
Week 9	Urban Soils	Urban Soils (Exercise 4)
Week 10	Urban Soils	
Week 10	Nutrient Management – Trees	Fertilizer Application (Exercise 5)
Week 11	Nutrient Management – Trees	
Week 11	EXAM II	
Week 12	Water Management – Landscape	Water Management (Exercise 6)
Week 12	Water Management – Landscape	
Week 13	Tree Preservation During Construction	Open
Week 13	THANKSGIVING	
Week 14	Risk Assessment	Tree Risk Assessment (Exercise 7)
Week 14	Risk Assessment	
Week 15	Arboriculture and the Law	Bid Writing/Job Specifications (Exercise 8)
Week 15	Open	
Final Exam: Monday-Tuesday, Dec. 14-15, 2020		