Syllabus – Urban Forestry (Forestry 444/644) – Spring 2024

Instructor: Dr. Robert Vanderhoof Room 194 CNR rvanderh@uwsp.edu 850-443-2526 (cell)

Office Hours: Tuesday 10:00 – 11:50 am and Thursday 10:00 – 11:50 am. You are encouraged to schedule an appointment in case I am away due to scheduled or unscheduled conflicts. It is recommended that you seek assistance if needed.

Course Meeting Time and Location: Lectures will meet from 9:00 – 9:50 pm on Tuesday and Thursday throughout the semester. Lab meets from 1:00pm – 2:50 pm, (TNR 320 or the computer lab when noted). I will also have labs developed as stand-alone exercises.

Attendance and Assignments: Your attendance in class is expected and an important part of learning. Absence during an exam or labs will result in a zero unless prior arrangements have been approved. Turn in assignments on time for credit. Emergency situations, illness, and life's challenges do arise. Please inform me as soon as practical in advance so arrangements can be made to complete any exam or assignment.

Learning Objectives: After completion of this class students will be able to:
1) Develop an urban forestry management plan.
2) Describe the urban forest, urban forestry, and benefits associated with green infrastructure.
3) Apply appropriate urban forest planning, management, and policy tools.
4) Conduct urban forest assessment techniques (e.g., tree inventory, tree risk assessments, tree valuation) and use this data to develop an assessment of the health, benefits, and costs associated with management of the tree population.
5) Develop skills with conventional and modern urban forestry tools.

This course is intended for students to learn and apply principles of Urban Forest Management of vegetation in developed areas. Urban forestry as a profession is comparatively new in response to society and landscapes that are increasingly becoming developed and urbanized. However, activities associated with urban forestry are historically rooted hundreds and thousands of years ago and have evolved to the current philosophic view of green infrastructure as an important component of an urban ecosystem. You will develop skills and abilities in urban forest assessment, benefits, costs, uses, valuation methods, planning, management, and the roles of federal, state, municipal, commercial, and utility urban forestry.

Grades: Grades are based on exams, quizzes and projects are as follows:

Evaluation Area	% of Grade
Exam 1	10% (100 Pts)
Exam 2	10% (100 Pts)
Final Exam (comprehensive)	20% (200 Pts)
Lab Assignments & Participation	35% (350 Pts)
Urban Forest Management Plan	25% (250 Pts)

Mean Score	Letter Grade	Mean Score	Letter Grade
100 - 93	A	79 - 78	C+
92 - 90	A-	77 - 73	C
89 - 88	B+	72 - 70	C-
87 - 83	B	69 - 68	D+
82 - 80	B-	67 - 60	D
		<60	F

Text and Readings: Lecture and labs will be based on material in Miller, Hauer, and Werner (Urban Forestry: Planning and Managing Urban Greenspaces, 3rd Edition) and additional outside readings to supplement information in the text are in Canvas or handouts.

Date	Course Subject Material (Lecture)	Readings
1/23	What is the Urban Forest, Urban Forestry, Urban Forest Sustainability et. al. (L1)	Miller Chapter 1
1/25	Evolution of Cities and Urban Forestry (L2, Recording) Social Needs and Values of Urban Society (L3)	Miller Chapter 2 Miller Chapter 3
1/30	Social Needs and Values of Urban Society (L3)	Miller Chapter 3
2/1	Functional Uses and Design of Urban Vegetation (L4)	Miller Chapter 4
2/6	Functional Uses and Design of Urban Vegetation (L4)	Miller Chapter 4
2/8	Functional Uses and Design of Urban Vegetation (L4)	Miller Chapter 4
2/13	Values and Liabilities of Urban Vegetation (L5)	Miller Chapter 5
2/15	Values and Liabilities of Urban Vegetation (L5)	Miller Chapter 5
2/20	Urban Forest Assessment – Street Tree Inventories (L6) **Exam 1**	Miller Chapter 6
2/22	Urban Forest Assessment – Street Tree Inventories (L6)	Miller Chapter 6
2/27	No Formal Class—Urban Forestry Management Plan	
2/29	No Formal Class –Urban Forestry Management Plan (UFMP) Work Time	
3/5	No Formal Class – Visit Community Tree Inventory	
3/7	No Formal Class – Visit Community Tree Inventory	
3/12	No Formal Class –Urban Forestry Management Plan (UFMP) Work Time	
3/14	Urban Forest Assessment – Park Tree Inventories (L7)	Miller Chapter 7
3/19 and 3/21 No Class – Spring Break		
3/26	No Formal Class –Urban Forestry Management Plan (UFMP) Work Time	Miller Chapter 8
3/28	Policy, Planning, and Urban Forestry (L8)	Miller Chapter 8
4/2	Vegetation Ordinances (L9)	Miller Chapter 9
4/4	Vegetation Ordinances (L9)	Miller Chapter 9
4/9	Utility Forestry: Planning, Safety, Reliability	
4/11	Street Tree Management – Planning & Budgets (L10) **Exam 2**	Miller Chapter 10, 13
4/16	Street Tree Management – Planning & Budgets	Miller Chapter 10, 13
4/18	Street Tree Management – Planting (L11)	Miller Chapter 11
4/23	Street Tree Management – Planting (L11)	Miller Chapter 11
4/25	Street Tree Management – Maintenance (L12)	Miller Chapter 12
4/30	Street Tree Management – Maintenance (L12)	Miller Chapter 12
5/2	Tree Risk Assessment – Decision Making (L13)	Pokorny et al. (2003)
5/7	Tree Risk Assessment – Decision Making (L13)	Pokorny et al. (2003)
5/9	No Formal Class – UFMP Work Time	
5/13	**Scheduled Comprehensive Final Exam Date (Monday 12:30 – 2:30 pm)**	

Note: Dates we do not formally meet for class

Date	Course Subject Mater	Readings	Assignments Due
1/22	Class Overview Urban Forest Management Project Overview 1) Introduce Webinar Exercise 2) Urban Forestry Management Plans	Lab HO Favorite Search Engine	
1/29	Urban Forest Economics – Net Benefits and Benefit: Cost Exercise (TNR Rm. 320 or Assigned Lab)	Miller 198-202 Hauer et al 2015, Vogt et al. 2015, Lab HO	
2/5	Urban Forest Assessment – Tree Canopy Cover (TCC) Analysis Exercise (TNR Rm. 320 or Assigned Lab)	Lab HO	UFMP Report Urban Forest Economics Exercise
2/12	Tree Health Assessment & Tree Appraisal – Valuation Exercise (Outside Lab) Urban Forest Management Project Data Collection	Lab HO	Tree Canopy Cover (TCC) Analysis
2/19	Urban Forest Assessment – Park Inventory and Management Plan Exercise (Outside Lab)	Lab HO	Tree Health & Tree Appraisal Valuation
2/26	No Formal Class – Street Tree Inventory Exercise & Management Plan Site Visit Data Collection		Webinar Exercise
3/4	No Formal Class – Management Plan Data Collection		Street Tree Inventory
3/11	Site Visit Debriefing, Dataset Finalization Urban Forest Management – i-Tree (TNR Rm. 320 or Assigned Lab)	Lab HO, skim i-Tree user manual	Park Inventory
3/18	No Class – Spring Break		
3/25	No Formal Class – Management Plan Work Time		
4/1	Tree Pruning Time & Budgets Exercise (ACL or Assigned Lab)	Lab HO	i-Tree Exercise
4/8	No Formal Class – Management Plan Work Time (ACL or Assigned Lab)		Tree Pruning Budget
4/15	No Formal Class – Management Plan Work Time (ACL or Assigned Lab)		
4/22	Tree Risk Management – Evaluation Exercise (Outside Lab)	Pokorny 2003, Lab HO	Tree Risk Management Exercise
4/29	Urban Forest Management Plan Presentations		
5/6	Arbor Day Tree Planting (Tentative)		Management Plan Final Report

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