SYLLABUS URBAN FORESTRY FORESTRY 444/644 – SPRING 2019

Instructor: Dr. Richard Hauer Room 323 CNR <u>rhauer@uwsp.edu</u> 346-3642 (office)

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: The lecture meets from 9:00 - 9:50 pm on Tuesday and Thursday in TNR 320. Lab section 1 meets from 8:00 - 9:50 am (TNR 320) and lab section 2 meets from 3:00 to 4:50 am (TNR 320) or the ACL when noted.

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 relatively 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:

and projects are as follows:		Score	Grade	Score	Grade
Evaluation Area % Exam 1 Exam 2 Final Exam (comprehensive) Lab Assignments & Participation Urban Forest Management Plan	<u>of Grade</u> 15% 15% 20% 35% 15%	100 - 93 92 - 90 89 - 88 87 - 83 82 - 80	A A- B+ B B-	79 - 78 77 - 73 72 - 70 69 - 68 67 - 60 <60	C+ C C- D+ D F

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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 D2L or handouts.

Date	Course Subject Material (Lecture)	Readings					
1/22	No Formal Class – Webinar Exercise Time	Miller Chapter 3					
1/24	What is the Urban Forest, Urban Forestry, Urban Forest Sustainability et. al. (L1)	Miller Chapter 1					
1/29	What is the Urban Forest, Urban Forestry, Urban Forest Sustainability et. al. (L1)	Miller Chapter 1					
1/31	Evolution of Cities and Urban Forestry (L2)	Miller Chapter 2					
2/5	Social Needs and Values of Urban Society (L3)	Miller Chapter 3					
2/7	Functional Uses and Design of Urban Vegetation (L4)	Miller Chapter 4					
2/12	Functional Uses and Design of Urban Vegetation (L4)	Miller Chapter 4					
2/14	Values and Liabilities of Urban Vegetation (L5)	Miller Chapter 5					
2/19	No Formal Class – WAA Conference (Exercise: Urban Forestry Management Plan Review)	Internet Exercise: Urban Forestry Management Plan					
2/21	Values and Liabilities of Urban Vegetation (L5)	Miller Chapter 5					
2/26	Exam 1						
2/28	Urban Forest Assessment – Street Tree Inventories (L6)	Miller Chapter 6					
3/5	Urban Forest Assessment – Street Tree Inventories (L6)	Miller Chapter 6					
3/7	Urban Forest Assessment – Park Tree Inventories (L7)	Miller Chapter 7					
3/12	Urban Forest Assessment – Park Tree Inventories (L7)	Miller Chapter 7					
3/14	No Formal Class – Work on Management Plan						
3/19 an	3/19 and 3/21 No Class – Spring Break						
3/26	No Formal Class: Work on Management Plan						
3/28	No Formal Class: Work on Management Plan						
4/2	Policy, Planning, and Urban Forestry (L9)	Miller Chapter 8					
4/4	Vegetation Ordinances (L10)	Miller Chapter 9					
4/9	Vegetation Ordinances (L10)	Miller Chapter 9					
4/11	Exam 2						
4/16	Street Tree Management – Planning (L11)	Miller Chapter 10					
4/18	Street Tree Management – Planning (L11)	Miller Chapter 10					
4/23	Street Tree Management – Planting (L12)	Miller Chapter 11					
4/25	Street Tree Management – Planting (L12)	Miller Chapter 11					
4/30	Street Tree Management – Maintenance (L13)	Miller Chapter 12					
5/2	Street Tree Management – Maintenance (L13)	Miller Chapter 12					
5/7	Tree Risk Assessment (L14)	Pokorny et al. (2003)					
5/9	Storm Damage Planning (L15)	Miller Chapter 13					
5/13	5/13 Scheduled Comprehensive Final Exam Date (Monday 8:00 – 10:00)						
Note	Note: Dates we do not formally meet for class						

Date	Course Subject Mater	Readings	Assignments Due
1/21	MLK Day University Holiday		
1/28	Urban Forest Management Project Overview development & preparation for project site The Urban Forest and Urban Forest Sustainability (L1)	Syllabi, Management plans & eLearn, webinars	
2/4	Urban Forest Economics – Net Benefits, Internal Rate of Return and Benefit: Cost Exercise (ACL or Other Computer Lab)	Hauer et al 2015, Vogt et al. 2015	Benefit Cost Exercise
2/11	Urban Forest Management Project Street Tree Inventories	Lab HO	Management Plan Report
2/18	 WAA Conference 1) Webinar Exercise 2) Urban Forestry Management Plans eLearn URBAN FORESTRY: An interactive online intro UFM 	Favorite Search Engine http://elearn.sref.info/	Street Tree Inventory
2/25	Values and Liabilities of Urban Vegetation – Valuation Exercise	Lab HO	Webinar Exercise
3/4	Urban Forest Assessment – Park Inventory and Management Plan Exercise	Lab HO	Public Meeting Exercise Valuation Exercise
3/11	Urban Forest Assessment – Canopy Analysis Exercise	Miller 198-202	Park Inventory Canopy Analysis
3/18	No Class – Spring Break		
3/25	 No Formal Lab Management Plan Group Work 		
4/1	Urban Forest Management – i-Tree Eco (Lab in ACL or Other Computer Lab)	Lab HO, skim i-Tree user manual	
4/8	Tree Technologies – Field Computers (GPS, PDA's, Tablets, Phones, et al.) Urban Forest Management i-Tree Canopy (Lab in ACL or Other Computer Lab)	i-tree Canopy	i-Tree Exercise
4/15	Urban Forest Management – Tree Pruning Time Estimation Exercise (Lab in ACL or Other Computer Lab)	Lab HO	Urban Forest Management Plan Draft i-Tree Exercise
4/22	Tree Risk Management – Evaluation Exercise	Pokorny 2003, Lab HO	Urban Forest Management Plan Returned
4/29	Urban Forest Management Plan Presentations		Tree Risk Management Exercise
5/6	Tree Planting with City of Stevens Point		Management Plan Final Report
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