Syllabus
Special Topics In Urban Forestry & Green Space Management
Forestry 449/733 – Spring 2021

Instructor: Rich Hauer   Room 323 CNR   rhauer@uwsp.edu   346-3642 (office)

Course Meeting Time and Location: Class meets 5:30 – 8:00 pm on Thursday in CNR 354. To join remotely use this link.

Meeting URL: https://uwsp.zoom.us/j/94562776581?pwd=SFNXYjhyZjRGcmQ1dktWd2xaWnZNUT09
Meeting ID: 945 6277 6581
Passcode: 219287

Attendance: Your attendance in class is expected and essential for discussion of the readings. In the event you are unable to make a class, please let me know.

Course Description and Learner Objectives: This course is intended for students to learn and synthesize advanced concepts with Urban Forest Management. We will accomplish this through weekly readings and class discussion to meet these objectives:
1) Explore the advantages and liabilities of accepted urban forest management practices and how they came to be,
2) Synthesize scientific principles and be able to relate to urban forest management, and
3) Demonstrate mastery of conveying scientific papers to others.

The course will cover several urban forest topical areas based on instructor and student interest. Some potential urban forestry topical areas for discussion include: inventories and 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 discussion and projects are as follows:

Evaluation Area	% of Grade
Discussion	50%
Project	50%

Mean Score	Letter Grade	Mean Score	Letter Grade
100 - 92	A	79 - 78	C+
91 - 90	A-	77 - 72	C
89 - 88	B+	71 - 70	C-
87 - 82	B	69 - 68	D+
81 - 80	B-	67 - 60	D
		<60	F

Week 1 (1/28) – Organization

Read all publications and come to class prepared to critically discuss these

Each student will be assigned a weekly topical area to lead the discussion

Week 2 (2/4) – Urban Forest Benefits, Costs, Services, and Disservices (Hauer)

Week 3 (2/11) – Emerald Ash Borer Management (All)

Week 4 (2/18) – Diversity of Urban Tree Populations (All)

Examples below, will be modified

Week 5 (2/25) – Urban Forest Wood Products *(Student Selected & Lead)*

Week 6 (3/4) – Ecological Impacts of Invasive Species *(Student Selected & Lead)*

Week 7 (3/11) – Community Engagement and Volunteerism *(Student Selected & Lead)*

Week 8 (3/18) – Ecosystem Services and Disservices *(Student Selected & Lead)*

Week 9 (4/1) – Human Health and Urban Greening *(Student Selected & Lead)*

Week 10 (4/8) – Tree Risk Assessment *(Student Selected & Lead)*

Week 11 (4/15) – Urban Wildlife *(Student Selected & Lead)*

Week 12 (4/22) – 1: Paper Abstract Exercise, 2: Work on Project

Week 13 (4/29) – 1: Submit Abstract Exercise, Submit Draft Project Paper, 3: Work on Project

Week 14 (5/6) – Class Presentations *(arrangement to be determined)*

Week 15 (5/13) – Class Presentations *(arrangement to be determined)*

Potential Topical Areas: for Weeks 5 – 11

Tree/Urban Forest Valuation
Tree Risk Assessment
Urban Forest as Bio-utilities (Ecological Functions)
Tree Care Practices, Fertilization, Maintenance, Pruning, etc.
Urban Tree Nurseries (grow your own or contract)
Rotation Length of Urban Trees (Biological and Economic)
Diversity of Urban Tree Populations
Productivity Measures
Urban Forest Wood Products
Urban Wildlife
Exotic and Invasive Plants
Insect Treatment
State Urban Forestry Programs
Commercial Urban Forestry
Utility Urban Forestry

Example Paper Selections and Topical Area from
1) We will Revise Based on Your Input and Interests
2) Typically, peer-reviewed publications will be used
3) You need to have your papers selected by 2/12 (discuss selected papers with Rich for final approval)
4) Send me (via e-mail) your selected papers and citations by 2/15

Project Abstract
Develop a 200 to 250 word abstract for a paper to be determined at a later date

Term Project Assignment

1) Evaluate and pick one of the research projects below, or develop your own project with the approval of the instructor(s). Due this by 2/12

2) Create a written report for your topic that includes an abstract, introduction, methods, results, discussion, conclusion, literature cited, and appropriate tables and figures to support your paper. (Approximately 10 pages including abstract, introduction, methods, results/discussion, conclusion, literature cites, tables, figures, etc.)

3) Present your topic to the class.

4) Example Suggested Topics
    a. Investigate the economic impact of emerald ash borer on the Wisconsin urban forest and quantify the economic merits of preemptive removal of ash trees
    b. Summarize literature of local urban forestry programs within the states
    c. Compare past urban forestry definitions and create a list of attributes contained within these to determine commonalities and/or unique attributes with the goal of proposing an urban forestry definition for all to use
    d. Define a sampling methodology for the State of Wisconsin to develop a Statewide Urban Forest Assessment
    e. What are current computer assisted trends in urban forest management and compare/contrast these
    f. Develop species profiles for urban tree failures for the City of Minneapolis and how these compare to the population as a whole
    g. Develop a study to use Ii-Tree as a benefits modeling tool
    h. Conduct a review of urban wildlife and relationships between trees and wildlife (these will likely involve good and negative aspects of urban wildlife)
    i. Model the relationship(s) between crown spread/crown volume, trunk diameter and terrace width using an existing street tree inventory
    j. Project the costs associated with incorporating the use of structural soils for the planting locations in downtown Stevens Point
    k. Develop a rapid storm damage assessment inventory for the City of Stevens Point
    l. A topic of your choice with instructor approval
    m. Integrate diversity indices into urban tree inventories and compare/contrast diversity

Several of the above projects can lead well into publishable scientific papers and joint authorship