

Forest Resources 4501/5501  
**Urban Forest Management: Managing Greenspaces for People**  
**Spring Semester, 2009**

**Instructor:** Gary Johnson, Professor of Urban and Community Forestry, Department of Forest Resources. Office: 101E Green Hall, 612-625-3765, [johns054@umn.edu](mailto:johns054@umn.edu).

**Office Hours:** By appointment.

**Contacting each other:** We'll use the official University of Minnesota form of impersonal communication – email.

**Text:** Urban Forestry: Planning and Managing Urban Greenspaces. Robert Miller, Second Edition.

**Time and Room:** Mondays and Wednesdays, 1:55-3:10 p.m., Green Hall 326.

**Required Assignments:**

	<u>Unit Points</u>	<u>Total Points</u>
Attendance (% of classes attended)		100
Position Paper	100	100
Newspaper Article for Arbor Day	100	100
“Community” Tree Preservation Ordinance/policy	100	100
Natural Resource Management Plan	100	100
Tree Board Meeting and Report	50	50
Seminar Organization/Lead	50	50
		<b>600 points</b>

**Grading:**

**Urban Forest Management Grading Scale:**

A = 540-600 B = 510-539 C = 450-509 D = 390-449 F = <390

*University Grading Standards:*

- A Achievement that is outstanding relative to the level necessary to meet course requirements.
- B Achievement that is significantly above the level necessary to meet course requirements.
- C Achievement that meets the course requirements in every respect.
- D Achievement that is worthy of credit even though it fails to meet fully the course requirements.

- S Achievement that is satisfactory, which is equivalent to a C- or better.
- F (or N) Represents failure (or no credit) and signifies that the work was either (1) completed but at a level of achievement that is not worthy of credit or (2) was not completed and there was no agreement between the instructor and the student that the student would be awarded an I.
- I (Incomplete) Assigned at the discretion of the instructor when, due to extraordinary circumstances, e.g., hospitalization, a student is prevented from completing the work of the course on time. Requires a written agreement between instructor and student.

**Academic Dishonesty**

Academic dishonesty in any portion of the academic work for a course shall be grounds for awarding a grade of F or N for the entire course.

**Credits and Workload Expectations**

For undergraduate courses, one credit is defined as equivalent to an average of three hours of learning effort per week (over a full quarter) necessary for an average student to achieve an average grade in the course. For example, a student taking a three-credit course that meets for three hours a week should expect to spend an additional six hours a week on coursework outside the classroom.

**Course Outline**

<u>Date:</u>	<u>Topic</u>
1/21	The face of urban greenspace management: 1) Urban to rural “natural” resources, 2) Urban infrastructure, and 3) People. Chapters 2 and 3.
1/26	Meet your clients for the semester: City of Maplewood and St. Anthony Park Community Council.
1/28	Effects of greenspaces on people: violence, maturity, health, quality of life. Chapter 4 and other.
2/2	Continued effects of greenspaces on people: recreation, business, property values. Chapter 5 and other.
2/4	Calculating environmental effects: Air, Water, Energy, Soil. Supplemental reading.
2/09	Urban Tree Canopy Assessments.
2/11	Street tree inventories: with or without volunteers. Chapter 6.
2/16	Inventorying non-traditional, open spaces. Chapter 7.

- 2/18 Risk assessment in a public setting: Hampton Park. Supplemental reading.
- 2/23 Risk assessment in a campus setting: U of MN Twin Cities Campus. Supplemental reading.
- 2/25 Community “Preparedness”: Minimizing the impacts of tree risks, storm damage and introduced invasive pests. Supplemental reading.
- 3/02 Urban greenspace issues of liability: negligence, trespass, liability, nuisances. **Student led class number one.** Readings from Lorrie Stromme and others.
- 3/04 Developing a management plan based on inventories and risks. Chapter 10.
- 3/09 Tree and forest appraisal. Chapter 5 and supplemental reading.
- 3/11 Tree City USA conditions. Citizen Advisory Groups and engaging the public. Pros and cons of other opinions and public involvement. **Student led class number two.**
- 3/16 Spring Break.
- 3/18 Spring Break
- 3/23 Green Vs. Gray infrastructure conflicts. **Student led class number three.**
- 3/25 Writing preservation plans.
- 3/30 Ordinances, policies, practices and management plans: which is most appropriate and how to institute them. Chapter 8 and 9.
- 4/01 Urban wildlife management.
- 4/06 Small woodlot management: trails, edge species invasions, view-shed development. Supplemental reading and chapter 14.
- 4/08 Ecosystem restoration: prairies, wetlands, invasive introduced species. Supplemental reading.
- 4/13 Water management in urban greenspaces: water quality and quantity; MS4 permits, storm water mitigation. Supplemental reading. **Student led class number four.**
- 4/15 Greenspace health issues: invasive introduced species: who is responsible? Supplemental reading and Chapter 12.
- 4/20 Greenspace health issues: the biology and control of Emerald Ash Borer. **Student led class number five.** Supplemental reading.
- 4/22 Street tree maintenance: optimum stocking levels, optimum diversity, planting programs, developmental pruning. Chapter 10 and 12.
- 4/27 Street tree maintenance and Utility arboriculture: Cost/Benefits of various pruning cycles. Chapter 10, 12 and 15. **Student led class number six.**
- 4/29 Principles of street tree design. Supplemental reading.
- 5/04 Planning open spaces. Chapter 8 and 14
- 5/06 Oral presentation of management plans.

**“Community” Tree Preservation Ordinance/Policy.** The objective of this exercise is to expose you to both the politics and biology of preserving greenspace in developing, urbanized areas. Maplewood, Minnesota is a first-ring suburb of St. Paul and is largely developed. However, there are many expansive open spaces that provide the residents

with a wide variety of recreational activities. As with many, fully-developed communities, those open spaces are at-risk due to the demand for development.

Maplewood wishes to protect/preserve those areas as well as individual members (a.k.a., trees) of those plant communities by developing an enforceable and flexible ordinance or policy. This is your assignment, to work with Maplewood on the development of a prototype for their community's tree preservation plan. Due 4/01/09.

**Position Paper.** Select and research any ordinance, bill, law at any level (local, county, state, federal) that will have an impact on urban natural resource (greenspace) management. Your position paper must be a minimum of three typewritten pages, double-spaced, 1.5 inch margins all around. Must be cited, no open opinions. Attach a one page letter to a decision maker that will listen to you and can affect the outcome of the bill/law/etc. Due 3/11/09.

**Newspaper Article for Arbor Day.** Select a suitable topic for an Arbor Day feature in a newspaper. Examples: why plant trees; environmental benefits of greenspaces; plants that attract wildlife; parks for children; how to recycle plant materials. Minimum of 500 words, maximum of 1000 words. Graphics may be included. Minimum of two edits by me. Selection of topic due by 3/2/09. Final draft due by 4/6/09.

**Natural Resource Management Plan.** This assignment will focus on developing a management plan for Hampden Park. Last year's class conducted a needs assessment on tree maintenance for the area. This year, you will use that assessment along with community and city input to develop a long-term management plan. First draft of plan due by 3/23/09. Written plan and oral presentation to the class and clients on 5/06/09.

**Tree Board Meeting and Report.** Find a local community that has a tree board/task force/committee/advisory commission and request permission to attend a meeting. Beautification committees are also acceptable. Attend the meeting, take "minutes" and write a report on the actions of the committee. In this report, explain the responsibilities of the board/committee, how often they meet, make-up of the board. Due by 4/27/09.

**Seminar Organization/Lead.** You will be responsible for one lecture's topic. Assemble a supplemental reading assignment and get the information to the class members one week prior to the class. Lead the discussion of the articles in the class time, monitor the progress of the class and conclude with a summary. All oral. Note dates on syllabus timeline.