URBAN FORESTRY
3 Credits
11:216:403
Spring 2023
Instructors: Jason Grabosky
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848-932-0050

Meets:	Monday	2-3:20 pm	Waller 108 or on-line
	Wednesday	2-3:20 pm	Waller 108 or on-line

Text: Miller R W, Hauer R J, Werner L P. 2015. Urban Forestry - Planning and Managing Urban Greenspaces 3rd Ed.

As a relatively young disciplinary focus within the realm of forest management, urban forestry is a term of varied definition reflecting professional training history as much as evolving organization and insight by practitioners, policy-makers and academics alike. Generally focused on the management of vegetated spaces in highly developed and populated areas, the term can scale its focus to specific pairing of trees on local city streets or expand to regional forest management planning for the protection of water resources to supply urban populations. It can be said that forestry is the discipline and urban is a context for management planning. This urban context involves the structures, people and design conventions within the developed landscape which can act independently or in concert for the betterment or decline of the environment in immediate contact with people occupying urban spaces. This course seeks to provide an introduction and overview of Urban Forestry as it plays out in New Jersey, in the United States and internationally.

The goals of this course are to:
1. Provide an introduction to definitions, topics and professions in urban forestry
2. Provide a working understanding of how the discipline and practice of urban forestry is organized within NJ and nationally
3. Develop an understanding of managing trees and other urban vegetation as a plant community, while being called upon to manage public trees on an individual tree level
4. Introduce students to industry Standards and Best Management Practices, their assumptions and alternatives when assumptions are proven unreliable
5. Develop an understanding of the structures and components within an urban or community forest management plan
6. Develop an understanding of the linkage between species and site for management and performance expectations and planning for provision of environmental services to urban populations
7. Gain a functional understanding and practical exposure to common analysis tools used in industry

A draft…. A Working Outline & Schedule to be adjusted and adapted based on class progress and good conversations

Week 1: Chapt 1,3 and Readings on Sakai

Wednesday 1/18   Introductions, Syllabus; Definitions & History

Week 2: Chapt 10 and Readings on Sakai

Monday 1/23   Guest Speaker Pam Zipse: An overview of how Urban Forestry is organized
                   within New Jersey.

Wednesday 1/25   History, Definitions, Urban Forest Measurements

Week 3: Chapt 4 and Readings on Sakai

Monday 1/30   NJ Urban Community Forestry state program
                   What is in a management plan (introduce CFMP outline project)
Wednesday 2/1   Engineering Uses of Trees (introduction to Environmental Services)

Week 4: Chapt 5,6

Monday 2/6   Inventory – Sticks vs. Canopy (Washington DC and NYC case studies) and some
                  NJ Suggestions
Wednesday 2/8   i-Tree Design (assign project due 2/13)

Week 5: Chapt 7

Monday 2/13   i-Tree Design projects due – collect and discuss
                  i-Tree Eco / Allometry discussion
Wednesday 2/15   Curves & Selection of Target Species

Week 6: Sakai Readings

Monday 2/20   ***Mid-Term Exam #1   TBD if we shift to an online frame for exams***
Wednesday 2/22   What's in a Million…
                  (assign Environmental Services deep dive, due 3/6)

Week 7: Chapt 14, Possible log in for NJ Forest Adapt

Monday 2/27   Rutgers Inventory and Plan-it Geo (Brian Clemson?)
Wednesday 3/1   Stocking / Urban Silviculture

Week 8: Chapt 11

Monday 3/6   Environmental Services deep dive reporting day
Wednesday 3/8   Selecting Nursery Stock / Transplanting

---Spring Break---

Week 9: Chapt 8,9, Sakai reading

Monday 3/20   Urban Forestry Laws and i-Tree Eco / Urban FIA Plot
                  Discuss and assign UF Laws project (due 3/29) and Plot project (due 4/26)
Wednesday 3/22   Diseases & Pests of the Urban Forest (part 1)

Week 10: Chapt 13

Monday 3/27	Guest Speaker:
	Joe Paulin – Urban Forest Wildlife or NJ DEP Urban Forestry staff
Wednesday 3/29	Urban Forestry Laws presentations and discussion

Week 11

| Monday 4/3 | Diseases & Pests of the Urban Forest (part 2) – When to treat / not treat |
| Wednesday 4/5 | *Mid-Term Exam #2* |

Week 12: Chapt 12

| Monday 4/10 | Storms & Safety |
| Wednesday 4/12 | Adaptive Management / Urban Silviculture |

Week 13: Chapt 15

| Monday 4/17 | Utility forestry as infrastructure and ecology |
| Wednesday 4/19 | Utility forestry as infrastructure and ecology |

Week 14

| Monday 4/24 | Wood Utilization – Harvest and Reuse |
| Wednesday 4/26 | Reporting Day – FIA/Eco plot and Management Plan Outline |

Week 15

| Monday 5/1 | Wood Utilization – Harvest and Reuse |

FINAL EXAM

Grading:

Mid-Term Exam I	20%
Mid-Term Exam II	20%

A	90%+	I-Tree Design Project	10%
B+	87 – 89.9%	I-Tree ECO plot field Project	15%
B	80 – 86.9%	Management Plan Draft	15%
C+	77 – 79.9%	Ecosystem Service Deepdive	10%
C	70 – 76.9%	Laws Deepdive	10%
D	65 – 69.9%		100%
F	less than 64.9%		

Academic Integrity at Rutgers

Principles of academic integrity require that every Rutgers University student:

- properly acknowledge and cite all use of the ideas, results, or words of others
- properly acknowledge all contributors to a given piece of work
- make sure that all work submitted as his or her own in a course or other academic activity is produced without the aid of unsanctioned materials or unsanctioned collaboration
- obtain all data or results by ethical means and report them accurately without suppressing any results inconsistent with his or her interpretation or conclusions
- treat all other students in an ethical manner, respecting their integrity and right to pursue their educational goals without interference. This requires that a student neither facilitate academic dishonesty by others nor obstruct their academic progress
- uphold the canons of the ethical or professional code of the profession for which he or she is preparing.

Adherence to these principles is necessary in order to insure that:

- everyone is given proper credit for his or her ideas, words, results, and other scholarly accomplishments
- all student work is fairly evaluated and no student has an inappropriate advantage over others
- the academic and ethical development of all students is fostered
- the reputation of the University for integrity in its teaching, research, and scholarship is maintained and enhanced.

Failure to uphold these principles of academic integrity threatens both the reputation of the University and the value of the degrees awarded to its students. Every member of the University community therefore bears a responsibility for ensuring that the highest standards of academic integrity are upheld.

– The Rutgers University Academic Integrity Policy

University life can be very stressful. In fact, there have been estimates that over 70% of students have at least one event which would suggest the benefit of counseling during their undergraduate career. You have already paid for access to help in student fees, so please use the tools that you have at your disposal to ensure your best opportunity for a sound education.

[Just In Case Web App](http://codu.co/cee05e)
http://codu.co/cee05e
Access helpful mental health information and resources for yourself or a friend in a mental health crisis on your smartphone or tablet and easily contact CAPS or RUPD.

Counseling, ADAP & Psychiatric Services (CAPS)

(848) 932-7884 / 17 Senior Street, New Brunswick, NJ 08901/   **health.rutgers.edu**:

CAPS is a University mental health support service that includes counseling, alcohol and other drug assistance, and psychiatric services staffed by a team of professional within Rutgers Health services to support students' efforts to succeed at Rutgers University. CAPS offers a variety of services that include: individual therapy, group therapy and workshops, crisis intervention, referral to specialists in the community and consultation and collaboration with campus partners.

Violence Prevention & Victim Assistance (VPVA)
(848) 932-1181 / 3 Bartlett Street, New Brunswick, NJ 08901 / vpva.rutgers.edu/
The Office for Violence Prevention and Victim Assistance provides confidential crisis intervention, counseling and advocacy for victims of sexual and relationship violence and stalking to students, staff and faculty. To reach staff during office hours when the university is open or to reach an advocate after hours, call 848-932-1181.

Disability Services
 (**848) 445-6800 / Lucy Stone Hall, Suite A145, Livingston Campus, 54 Joyce Kilmer Avenue, Piscataway, NJ 08854 /** https://ods.rutgers.edu/
The Office of Disability Services works with students with a documented disability to determine the eligibility of reasonable accommodations, facilitates and coordinates those accommodations when applicable, and lastly engages with the Rutgers community at large to provide and connect students to appropriate resources.

Full disability policies and procedures are at http://disabilityservices.rutgers.edu/
Students with disabilities requesting accommodations must follow the procedures outlined at http://disabilityservices.rutgers.edu/request.html