

SANR325/NRE 3425 Fundamentals of Arboriculture

Fall Semester 2019

Lecture: Two hour TBA. Location TBA

Lab: Three hours; indoors/outdoors TBA

Adjunct Instructor

Contact Info:

Course Description

An introduction to the theory, science and practice of evaluating, growing, managing and safe removal of trees within or in close proximity to built environments.

Upon completion of the course, students will be able to:

- 1) Express an understanding of tree physiology, soil and site considerations, and other tree-growing requirements.
- 2) Recognize tree health and structural issues and identify key tree pests and disease conditions.
- 3) Demonstrate work-space safety practices for general arboricultural work.
- 4) Demonstrate competency in the use of essential arboricultural tools and equipment.
- 5) Utilize integrated pest management and other cultural techniques appropriately in tree care and management.
- 6) Express knowledge of tree law and arboricultural regulations, licensing, and record-keeping standards.

Laboratories are field-based and will take place in outdoor conditions. Be prepared for rain, ticks, insects, poison ivy, rugged terrain, physical activity and other field conditions.

Text Books

Arboriculture: Integrated Management of Landscape Trees, Shrubs, and Vines by

Richard Wilson Harris; or

Tree Maintenance by P. Pirone, T. Pirone, J.R. Hartman and M.J. Sall

Course Grading

Lecture

- Exam, 1/3 Term (20% of grade). This exam will include all lecture material to that point. (1st third assessment)
- Exam, 2/3 Term (20% of grade). Exam will include all lecture material from the second third of the semester. (2nd third assessment)
- Final Exam, comprehensive. (25% of grade)

Laboratory (Field Component)

- Individual lab exercises will be graded and collectively will account for 20% of the course grade.
- Quizzes (15% of grade). Quizzes will be given during most lab sessions.

Homework

- Homework will include assigned readings and completion of lab reports.

Percentage	Grade
93.6 – 100	A
90.0 – 93.5	A-
86.6 – 89.9	B+
83.4 – 86.5	B
80.0 – 83.3	B-
76.8 – 79.9	C+
73.4 – 76.7	C
70.0 – 73.3	C-
66.8 – 69.9	D+
63.4 – 66.7	D
60.0 – 63.3	D-
< 60.0	F

This numerical breakdown will be used to assign final grades

Tentative Course Calendar - SANR 325 Fundamentals of Arboriculture

LECTURE		LAB
Week 1	Introduction	
	Tree biology	Tree architecture and growth basics
Week 2	Tree biology	
	Root structure and function	Tree Selection– Right tree/right place
Week 3	Site factors	
	Soil considerations for tree growth	Below ground/Root zone conditions
Week 4	Soil: texture, moisture and nutrients	
	Soil Testing	Tree nutrition: Moisture, pH, fertilization.
Week 5	Planting basics	
	Site preparation	Planting: seedlings, saplings, root-balled stock
Week 6	1/3-Term Exam	
	Managing early tree growth and development	Pruning and other cultural techniques.
Week 7	Tree Health: Structural defect & decay	
	Tree health: Pests and Diseases	Evaluating tree health: Insect pest identification

		Tree disease identification
Week 8	Tree health: Pests and Diseases	
	Managing tree health	Managing Tree Health: Integrated Pest Management
Week 9	Managing tree health	
	Tools and Equipment	Safety considerations. Chemical treatments.
Week 10	Managing Maturing trees	
	More tools and Equipment	Safety! Climbing and other means of crown access. Saws, ropes and other hardware. Pruning, Cabling, Bracing.
Week 11	2/3-term exam	
	Trees, infrastructure and utilities	Roadside tree management
Week 12	Tree law and state regulations	
	Licensing and Record-keeping	Tree inventories.
Week 13	No class	Thanksgiving
Week 14	Trees and Construction	
	21 st Century Arboriculture	Unique challenges.
Week 15	Review	
	Final Exam	

For references to University policies on discrimination, harassment, Interpersonal Violence and absences for religious and other activities please see:

<http://provost.uconn.edu/syllabi-references>