FORESTRY 232 – SILVICS AND DENDROLOGY
Fall 2022 SYLLABUS

Lecture Instructor: Dr. Richard Hauer, 323 CNR, rhauer@uwsp.edu, 715-346-3642 (office)

Office Hours: Monday 8:00 – 8:50 am and Wednesday 8:00 – 9:50 am in person or via Zoom Link Below: https://urldefense.com/v3/__https://ufl.zoom.us/j/99955620609?pwd=QWtQOWRzUHo2RWJOVFMxSVFJMGZodz09__;!!OgRYtnnXsQ!M0WpwwZo5lXxxFYCTULwHlb3ckmuw4mTU9E9tL4Zozhut3hsBpLhlhi5FBbebB2h3D7IaUKvlKBH14c$ **passcode 279530**. Students 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: Lecture meets in TNR 120 on Monday and Wednesday from 1:00 – 1:50 pm. Labs meet in TNR 300, see Lab syllabus for assigned lab meeting time.

Attendance: Did you know that students who attend class regularly do better. Pick a schedule that works and try to stick to it. Active participation in class is expected and greatly increases the odds you will master a subject. Absence from an exam or quiz will result in a zero unless you make prior approval or arrangements.

Learning Objectives: After completion of this course you should be able to:
1) Identify trees and shrubs in the field by leaf, twig, fruit, bark, and other relevant attributes.
2) Identify woody plants with a key by twig and fruit.
3) Associate plant range and site conditions with covered tree and shrub species.
4) Predict the likelihood of plant tolerance to site conditions in urban and rural forests.
5) Associate important silvics and morphological characteristics with plants covered in the class and their uses in urban and rural forests.

Grade Policy: Grades are based on exams and laboratory quizzes as follows:

Evaluation Area	% of Grade
Lab – Quizzes (11 quizzes)	55%
Lecture – Exams (5 exams)	45%

Mean Score	Letter Grade	Mean Score	Letter Grade
100 - 93	A	79 - 78	C+
92 - 90	A-	77 - 73	C
89 - 88	B+	72 - 70	C-
87 - 83	B	69 - 68	D+
82 - 80	B-	67 - 60	D
		<60	F

Texts: Assignments are from the following texts as indicated in the attached outline:

Barnes, B.V., D. R. Zak, S. R. Denton, and S. H. Spurr. 1998. Forest Ecology. 4th ed. John Wiley & Sons, New York, N.Y. 774 pp.

Hardin, J.W., Leopold, D.J., and F.W. White. 2001. Harlow & Harrar's Textbook of Dendrology. 9th Ed. McGraw-Hill Book Co., New York, N.Y. 534 pp.

On line: The following links are useful on-line references for silvics and woody plant ID
Silvics of North America: https://www.srs.fs.usda.gov/pubs/misc/ag_654/table_of_contents.htm
Flora of Wisconsin: http://wisflora.herbarium.wisc.edu/
Trees of Wisconsin: https://www.uwgb.edu/biodiversity-old/herbarium/trees/tree_intro01.htm
Dendrology Factsheets at Virginia Tech: https://dendro.cnre.vt.edu/dendrology/factsheets.cfm
University of Connecticut: http://hort.uconn.edu/
Oregon State University Plants: http://landscapeplants.oregonstate.edu/
Gymnosperm Database: http://www.conifers.org/
USDA Plants Database : http://plants.usda.gov/
The International Plant Names Index: http://www.ipni.org/

Course Location: Canvas Portal (https://www.uwsp.edu/canvas/Pages/default.aspx)

Lecture Schedule

Dates	Topic (# of Lectures)	Readings
Sept 5	No Lecture, Labor Day	
Sept 7	Introduction and Silvics Concepts	Barnes et al. Ch. 1
Sept 12	Work on Self-Treevaluation Exercise	Hardin pp. 101-208
Sept 14	Work on Self-Treevaluation Exercise	Hardin pp. 209-242
Sept 19	Introduction and Silvics Concepts	Hardin et al. Ch. 6
Sept 21	Introduction and Silvics Concepts	Barnes et al. Ch. 8 & 9
Sept 26	Systematics Gymnosperms: Ginkgoaceae, Taxaceae	Barnes et al. Ch. 4 Hardin Ch2, pp. 97-100
Sept 28	Pinaceae	Hardin pp. 101-208
Oct 3	**Hour Exam (1)**	
Oct 5	Alex Feltmeyer Forest Health Specialist (WIDNR) Intersection of Forests & Dendrology	
Oct 10	Pinaceae	Hardin pp. 101-208
Oct 12	Pinaceae	Hardin pp. 101-208
Oct 17	Pinaceae	
Oct 19	Cupressaceae	Hardin pp. 209-242
Oct 24	**Hour Exam (2)**	
Oct 26	Cupressaceae	Hardin pp. 209-242
Oct 31	Angiosperms: Magnoliaceae	Hardin pp. 243-254
Nov 2	Lauraceae, Platanaceae	Hardin pp. 255-263
Nov 7	Hamamelidaceae, Ulmaceae	Hardin pp. 263-278
Nov 9	**Hour Exam (3)**	
Nov 14	Moraceae, Juglandaceae	Hardin pp. 278-304
Nov 16	Juglandaceae, Fagaceae	Hardin pp. 305-359
Nov 21	Fagaceae, Betulaceae	Hardin pp. 305-359
Nov 23	**Virtual Hour Exam (4)**	
Nov 28	Betulaceae	Hardin pp. 359-375
Nov 30	Tiliaceae, Salicaceae	Hardin pp. 379-408
Dec 5	Rosaceae	Hardin pp. 409-415
Dec 7	Fabaceae	
Dec 12	Hippocastanaceae, Sapindaceae (syn Aceraceae)	
Dec 14	Sapindaceae (Aceraceae), Oleaceae, Bignoniaceae	
Dec 21	**Hour Exam (5) (Wednesday 8:00 am – 10:00 am)**	

Lab Schedule

Lab Instructors

Dr. Richard Hauer, 323 TNR, rhauer@uwsp.edu, 715-346-3642
Dr. Holly Petrillo, 363 TNR, Holly.Petrillo@uwsp.edu, 715-346-4230
Dr. Melinda Vokoun, 376 TNR, mvokoun@uwsp.edu, 715-346-2342
Mr. Jeremy Natzke TNR 360A; jenatzke@uwsp.edu; 715-218-2924

Lab sections (Instructor)

1 – M 8:00 – 10:50 (Vokoun)
2 – W 8:00 – 10:50 (Natzke)
3 – R 9:00 – 11:50 (Vokoun)
4 – M 2:00 – 4:50 (Hauer)
5 – T 2:00 – 4:50 (Petrillo)

Date (week starting)	Topic
Pre-Lab Work	On-line Introduction in CANVAS, 5, & 7 in Textbook of Dendrology)
Sept. 6, 7, 8, 12	**Intro Quiz (1%)** Campus and Schmeeckle Reserve
Sept. 13, 14, 15, 19	**Quiz 1 (5%)** Campus
Sept 20, 21, 22, 26	**Quiz 2 (5%)** Jordan Park
Sept 27, 28, 29, Oct 3	**Quiz 3 (5%)** Wisconsin River Flowage
Oct 4, 5, 6, 10	**Quiz 4 (5%)** Iverson Park
Oct 11, 12, 13, 17	**Quiz 5 (5%)** Steinhaugen
Oct 18, 19, 20, 24	**Quiz 6 (5%)** Campus
Oct 25, 26, 27, 31	**Quiz 7 (5%)** Campus
Nov 1, 2, 3, 7	**Quiz 8 (5%)** Campus
Nov 8, 9, 10, 14	**Quiz 9 (5%)** Campus
Nov 15, 16, 17, 21	**Quiz (2% & 8%)** Twigs
Nov 22, 23, 24, 28	No Lab (Thanksgiving Break)
Nov 29, 30, Dec 1, 5	Cones and Fruit
Dec 6, 7, 8, 12	**Quiz (2% & 8%)** Cones and Fruit

The lowest two quiz scores will be dropped, with 7 quizzes worth 35% of your course grade.

Lab grades: Lab quizzes make up 55% of your course grade. Each field lab quiz is weighted 5% equally (35% total), twig (10% total), and cone/fruit (10% total) labs will be combined to determine your lab grade. All field quizzes are closed book and you will need to know common name, genus, species, and family for species seen previously on fieldtrips. Species covered in lab generally will have been reviewed in the field as well, but regardless, the same information is required.

Text and supplies for lab:(Available online). Harlow, William M. 1946. Fruit Key and Twig Key. Dover Publications, Inc.

Barnes, B.V., and W.H. Wagner, Jr. 2004. Michigan Trees, Revised and Updated. The University of Michigan Press, Ann Arbor, Michigan is very helpful, but *optional*