FORESTRY 232 – SILVICS AND DENDROLOGY
Fall 2019 SYLLABUS

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

Office Hours: Monday 8:00 – 8:50 am, Wednesday 8:00 – 9:50 am, or when my door is open. 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. Attendance in class is expected and greatly increases the odds you will master a subject. Absence during an exam or lab 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 (7 quizzes)	56%
Lecture – Exams (4 exams)	44%

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: http://www.uwgb.edu/biodiversity/herbarium/trees/tree_list01.htm
Dendrology Factsheets at Virginia Tech: http://dendro.cnre.vt.edu/dendrology/factsheets.cfm
University of Connecticut http://www.hort.uconn.edu/plants/
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 2	No Lecture, Labor Day	
Sept 4	Introduction and Silvics Concepts	Barnes et al. Ch. 1
Sept 9	Introduction and Silvics Concepts	Hardin et al. Ch. 6
Sept 11	Introduction and Silvics Concepts	Barnes et al. Ch. 8 & 9
Sept 16	Systematics Gymnosperms: Ginkgoaceae, Taxaceae	Barnes et al. Ch. 4 Hardin Ch2, pp. 97-100
Sept 18	**Hour Exam (1)**	Hardin pp. 101-208
Sept 23	Pinaceae	Hardin pp. 101-208
Sept 25	Pinaceae	Hardin pp. 101-208
Sept 30	Pinaceae	Hardin pp. 101-208
Oct 2	Cupressaceae	Hardin pp. 209-242
Oct 7	Quest Lecture & or Self-Treevaluation Exercise	
Oct 9	Quest Lecture & or Self-Treevaluation Exercise	
Oct 14	Cupressaceae	Hardin pp. 209-242
Oct 16	**Hour Exam (2)**	
Oct 21	Angiosperms: Magnoliaceae	Hardin pp. 243-254
Oct 23	Lauraceae, Platanaceae	Hardin pp. 255-263
Oct 28	Hamamelidaceae, Ulmaceae	Hardin pp. 263-278
Oct 30	Moraceae, Juglandaceae	Hardin pp. 278-304
Nov 4	Self-Exercise	
Nov 6	**Hour Exam (3)**	
Nov 11	Juglandaceae, Fagaceae	Hardin pp. 305-359
Nov 13	Fagaceae, Betulaceae	Hardin pp. 305-359
Nov 18	Betulaceae	Hardin pp. 359-375
Nov 20	Tiliaceae, Salicaceae	Hardin pp. 379-408
Nov 25	Ericaceae, Ebenaceae, Rosaceae	Hardin pp. 409-415
Nov 27	**Virtual Hour Exam (4)**	
Dec 2	Rosaceae	Hardin pp. 409-415
Dec 4	Fabaceae	Hardin pp. 415-425
Dec 9	Hippocastanaceae, Sapindaceae (syn Aceraceae)	Hardin pp. 439-459
Dec 11	Sapindaceae (Aceraceae), Oleaceae, Bignoniaceae	Hardin pp. 459-482
Dec 17	**Hour Exam (5) (Tuesday 12:30 – 2:30 pm)**	

Lab Schedule

Lab Instructors

Dr. Richard Hauer, 323 TNR, rhauer@uwsp.edu, 715-346-3642
Dr. James Cook, 242 TNR, jcook@uwsp.edu, 715-346-2269
Dr. Holly Petrillo, 363 TNR, Holly.Petrillo@uwsp.edu, 715-346-4230
Dr. Melinda Vokoun, 376 TNR, mvokoun@uwsp.edu, 715-346-2342

Lab sections (Instructor)

1 – W 8:00 – 10:50 (Vokoun)
2 – M 9:00 – 11:50 (Cook)
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
Sept. 3, 4, 5, 9	Introduction (Ch. 3, 4, 5, & 7 in Textbook of Dendrology) Campus
Sept. 10, 11, 12, 16	**Quiz 1 (7%)** Campus and Schmeeckle Reserve
Sept. 17, 18, 19, 23	**Quiz 2 (7%)** Jordan Park
Sept 24, 25, 26, 30	**Quiz 3 (7%)** Wisconsin River Flowage
Oct 1, 2, 3, 7	**Quiz 4 (7%)** Country Road X
Oct 8, 9, 10, 14	**Quiz 5 (7%)** Steinhaugen
Oct 15, 16, 17, 21	Twig lab (indoors)
Oct 22, 23, 24, 28	Twig lab (indoors) **(Quiz 2.5%)**
Oct 29, 30, 31, Nov 4	Twig lab (indoors) **(Quiz 2.5%)**
Nov 5, 6, 7, 11	**Quiz (8%)** Twigs
Nov 12, 13, 14, 18	Cone lab (indoors)
Nov 19, 20, 21, 25	Fruit lab (indoors)
Nov 26, 27, 28, 2	No Lab (Thanksgiving Break)
Dec 3, 4, 5, 9	**Quiz (8%)** Cones and Fruit (indoors)

Lab grades: Lab quizzes make up 56% of your course grade. Each field lab quiz is weighted equally (35% total), twig lab (13% total), and cone/fruit (8% total) 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 in Lab). 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*.