

FORESTRY 203- FIELD DENDROLOGY

COURSE SYLLABUS FALL 2012

updated 08/22/12

INSTRUCTORS:

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COURSE WEB-SITE

ANGEL: <https://cms.psu.edu/frames.aspx>

MEETING TIME AND PLACE

SECTION 001: Tue 8:00-12:05, Thur 8:00-11:00

SECTION 601: Tue 1:25-5:30, Thur 1:25-4:25

We will meet in the southwest courtyard outside the Forest Resources Building and depart from there. You must be on time since we depart for our field destination promptly. You are not permitted to drive separately.

OBJECTIVES

- To introduce you to many of the common woody plant species encountered in Pennsylvania and the region and the taxonomic traits used in their identification.
- To teach you the main diagnostic skills used for woody plant identification, including the use of dichotomous keys.
- To familiarize you with several of the resources used for identification and continued study of woody plants in Pennsylvania and the region.

COURSE FORMAT

During each class, 0-11 species of woody plants will be introduced. Information regarding technical identification characteristics, botanical classification, biological and ecological traits, and economic utilization will be provided. Most introductions will occur in the field; a few taxa will be introduced via keying exercises conducted in the field and classroom on two separate dates.

EVALUATION OF STUDENT PERFORMANCE

With the exception of the first meeting, you will be asked during each class to identify and provide the correct name for species encountered at random in the field. These "pop" quizzes will include all species introduced to date. Repetitive quizzing is intended to ensure that you have good familiarity with the species introduced during this course. The course is structured such that more quizzes are given during the second half of the semester; this is intended to facilitate gradual learning and increased comfort with

botanical nomenclature and species recognition before the majority of grade points are awarded.

Typically, there will be time for 10-35 specimen quizzes, but the number given per meeting may be more (or less) depending upon the time available. For each quiz specimen, you can earn up to 2 points for correct identification to genus (1/2 point), specific epithet (1/2 point), botanical family (1/2 point) and a common name (1/2 point). An example of a quiz cards is given on page 6 of the syllabus. To receive full credit, spelling must be correct; misspelled words will result in one-quarter or no credit. You can expect between 500-700 field quizzes (worth approximately 1,000-1,400 points) over the course of the semester. All quizzes given during the final class (Dec 13) will be for extra-credit.

Final letter grades will be calculated by dividing the total number of points that you have earned by the total number of possible points available to you, and multiplying by 100. Letter grades will be assigned using the following percent scale:

A = 93-100%	B+ = 88-89.9%	C+ = 78-79.9%	D = 60-69.9%
A- = 90-92.9%	B = 82-87.9%	C = 70-77.9%	F = 59.9% and below
	B- = 80-81.9%		

ATTENDANCE POLICY

Due to the rigorous pace of the course, and because there will be no opportunities to make up any missed materials and/or quizzes, you are expected to be present at every class meeting. In the event of illness, you are granted two (2) absences for the semester. Your attendance record will have the following results:

0 absences = you have the option to drop quiz point totals from two classes, to be applied during final grade calculation at the end of the semester.

1 absence = you have the option to drop quiz point totals from one class, to be applied during final grade calculation at the end of the semester; quiz point total for the one missed class will not be included in your final grade determination.

2 absences = you have no quiz drop options; the instructor applies both drops automatically towards the first two missed classes; these quiz point totals for both missed classes will not be included in final grade determination.

3+ absences = you have no quiz drop options; the instructor applies both drops automatically towards the first two missed classes; quiz point totals for both missed classes will not be included in final grade determination, but each additional missed class (i.e., 3rd missed class and beyond) is included as a score of zero.

ACADEMIC INTEGRITY

Academic integrity includes a commitment not to engage in or tolerate acts of falsification, misrepresentation or deception. Such acts of dishonesty violate the fundamental ethical principles of the University community and compromise the worth of work completed by others. The informal nature of the field excursions and the potential for student intermingling means that there are often instances where the inclination towards various forms of dishonesty may be great. Such dishonesty, in any form, will not be tolerated. Academic dishonesty is a serious violation of ethical conduct and University policy.

While the demands of this course may at times seem overwhelming, the information and skills we seek to instill in you in this course are highly valued in the natural resource professions. It is therefore of no benefit to cheat since the material taught during this course is extremely practical and will likely be called upon in your professional career.

Any student suspected of dishonest behavior during a class will receive a warning. Subsequent infractions will result in a zero being recorded for quizzes for that day. A pattern of dishonesty or questionable behavior will result in the instructors taking action to recommend formal dismissal from the course. In order to reduce opportunities for dishonest behavior, the following precautionary measures will be asked of you while in the field:

- Nothing is to be kept on your clipboard except for the quiz answer cards. Notes taken during class must be put away during each quiz.
- There is to be no talking when you are taking a quiz. After giving the instructor an answer card you must step aside and may talk quietly with others that are also done. There should be no discussion of the specimen until after every group member has finished.
- You should maintain ample space between the next student during quizzes. If you “group together” with another student, you will be warned and continued grouping with others will result in a zero for the quiz that day.

University policy concerning academic integrity and code of conduct can be found at the following website: <http://studentaffairs.psu.edu/conduct/codeofconduct>, [Academic Integrity Guidelines for the College of Agricultural Sciences](#).

EXPECTED CONDUCT DURING CLASS

You are expected to be respectful of your peers and towards the environment during the time we will spend together this semester, and concentrate on the instruction being provided. For these reasons, the following prohibitions will be in place in this course: no tobacco products, no cell or smart phone use, no sending or receiving text messages, no headphones and no littering. Repeat violators will be referred to the Division of Student Affairs (<http://studentaffairs.psu.edu/>).

PERSONAL RESPONSIBILITY STATEMENT

This course will involve field trips that involve potential hazards including inclement weather, rugged terrain, falling branches, insects and snakes. It is your responsibility to be prepared for these conditions by dressing appropriately and by being constantly mindful of potential field hazards. We will do our best to advise you beforehand about any possible conditions/hazards that you may encounter at any specific field location. We reserve the right to prohibit you from participating in a field trip if you are not prepared for the expected field conditions or if your behavior unduly increases the risk of injury to yourself or others around you.

TEXTS

Required:

FOR 203 course packet. 2007. Containing excerpts from: Fralish, J.S. and Franklin, S.B. 2002. *Taxonomy and Ecology of Woody Plants in North American Forests (Excluding Mexico and Subtropical Florida)*. John Wiley and Sons.

Other pertinent books and resources:

Books:

Fergus, C. 2002. *Trees of Pennsylvania and the Northeast*. Stackpole Books.

Rhoads, A. and Block, T. 2004. *The Trees of Pennsylvania*. University of Pennsylvania Press.

Rhoads, A. and Block, T. 2007. *The Plants of Pennsylvania*. University of Pennsylvania Press.

Seiler, JR, J. Peterson, and EC Jensen, 2006. *Woody plants in North America*, a 3-CD set.

Sibley, D.A., 2009. *The Sibley Guide to Trees*. Published by Alfred A. Knopf.

Websites:

Virginia Tech Dendrology, (<http://dendro.cnre.vt.edu/dendrology/main.htm>), SUNY Dendrology YouTube Videos

(<http://www.youtube.com/playlist?list=PLBE1197A3397CAE00&feature=plcp>), USDA

Plant Website (<http://plants.usda.gov/java/>), University of Connecticut Plant Database

(<http://www.hort.uconn.edu/plants/>)

ADDITIONAL COURSE SUPPLIES

Required: blank quiz cards, non-transparent clipboard, one clothing item w/hunter-orange coloration

Optional: pocket knife, hand lens, rain gear, hiking boots, warm clothes

SPECIAL NEEDS

Please alert us if you have any special concerns or considerations that we should be aware of. This includes any learning disabilities, handicaps or allergies that might interfere with your safety or performance in this course. This information will remain strictly confidential, and special needs will be accommodated as best as possible with all due discretion.

FIVE TIPS FOR SUCCESS IN THIS COURSE

1 – Always know where you are in the **landscape**. Two-thirds of correct identification is the result of knowing what you are likely to encounter. The occurrence of trees and other vegetation is often non-random.

2 – Always look on the ground and in the vicinity for **evidence**. Fallen cones, fruits, and other structures are invaluable when dealing with large specimens. Similarly, except in cultivation, trees and other woody plants rarely occur in isolation so look around to see what is in the area.

3 – Use your **nose**. Many trees and plants possess aromatic parts that can be useful in making a positive identification. Keep in mind that poison-ivy is introduced in this course!

4 – Go with your **gut feeling**. It is often the case that what first comes to mind is the correct choice. Don't overly deliberate; if it proves to be wrong, this will be instructive in itself.

5 – **Test yourself as much as possible**. It is too easy these days to read a book or surf the net in order to learn identification characteristics. These are no replacement for in-the-field hands-on learning. Take the time to ask yourself "what is this?" on your way to class or while you are out-of-doors.

TICKS From: <http://www.cdc.gov/ticks/>

Ticks transmit Lyme disease to humans. Typical symptoms of Lyme disease include fever, headache, fatigue, and a characteristic skin rash called erythema migrans. If left untreated, infection can spread to joints, the heart, and the nervous system. Lyme disease is diagnosed based on symptoms, physical findings (e.g., rash), and the possibility of exposure to infected ticks. Most cases of Lyme disease can be treated successfully with a few weeks of antibiotics.

STEPS TO PREVENT TRANSMISSION OF LYME DISEASE

Find and Remove Ticks from Your Body

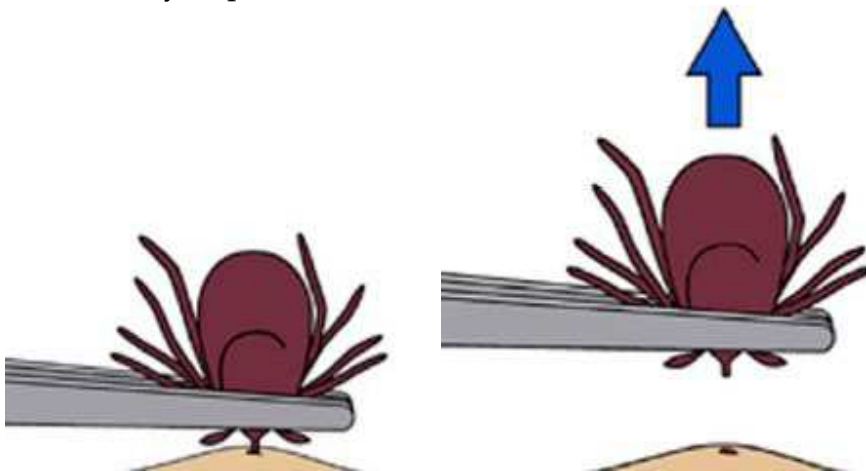
- Bathe or shower as soon as possible after coming indoors (preferably within two hours) to wash off and more easily find ticks that are crawling on you.
- Conduct a full-body tick check using a hand-held or full-length mirror to view all parts of your body upon return from tick-infested areas.
- Carefully examine day packs. Tumble clothes in a dryer on high heat for an hour to kill remaining ticks.

How to remove a tick

- Use fine-tipped tweezers to grasp the tick as close to the skin's surface as possible.
- Pull upward with steady, even pressure. Don't twist or jerk the tick; this can cause the mouth-parts to break off and remain in the skin. If this happens, remove the mouth-parts with tweezers. If you are unable to remove the mouth easily with clean tweezers,
- After removing the tick, thoroughly clean the bite area and your hands with rubbing alcohol, an iodine scrub, or soap and water.
- Avoid folklore remedies such as "painting" the tick with nail polish or petroleum jelly, or using heat to make the tick detach from the skin. Your goal is to remove the tick as quickly as possible--not waiting for it to detach.

Follow-up

- If you develop a rash or fever within several weeks of removing a tick, see your doctor. Be sure to tell the doctor about your recent tick bite, when the bite occurred, and where you most likely acquired the tick.



QUIZ ANSWER CARD INSTRUCTIONS

- 1 - Purchase 3 x 5 (inch) note cards (you will need 500 to start).
- 2 - Cut each note card in half (as shown below). Quizzes will not be accepted in any other format.
- 3 - Each quiz answer must be submitted on a half note card with the following information:

Quiz number

Student name

Genus - 1/2 point

Specific epithet - 1/2 point

Botanical family (scientific name) - 1/2 point

Common name (must be from course calendar hand-out) - 1/2 point

Order matters! Students will be given leeway the first 1-2 times quizzed on a species; after that anything out of order will be graded accordingly. No red ink!

Quiz card example:

