

Hort/Land Arc 263
Landscape Plant Identification, Culture, and Use (3 credits)
Fall 2014

Instructor: Dr. Laura G. Jull
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Office hours: 3:30-4:30 p.m. Tuesday (my office) and Thursday (right after lab at the arboretum)
or by appointment

Teaching Assistant: None

Meeting times: Lecture: Monday, 3:30-4:45 p.m., Rm 351 Moore Hall/Plant Sci.
Lab: Tuesday and Thursday, 1:20-3:15 p.m., Rm 128 Plant Sci. for first week, then starting the
second week, Tuesday labs will meet by plant samples and Thursday labs will meet at the arboretum

Course Description: Field identification, landscape characteristics, culture, uses, and adaptability of about 300+ woody ornamental plants (average plant number each week is 28 new plants/week with 12 plant lists). We cover trees, shrubs, evergreen, vines, and groundcovers.

Prerequisites: Introductory Botany course is a **MUST** to take this class before enrolling in my course. You will NOT be allowed to take this class if you have not completed an intro botany course first! Class intended primarily for Horticulture and Landscape Architecture majors. This is not a survey or overview course.

Texts and References: Required

1) Course Packet: Hort/LA 263, Landscape Plants: available at Pigwick Papers (Bob's Copy Shop) on 208 North Charter Street from 9:00 a.m. till 5:00 p.m. (around \$100)

Highly Recommended

- 1) Manual of Woody Landscape Plants: Their Identification, Ornamental Characteristics, Culture, Propagation, and Uses, 6th ed. 2009 by Michael A. Dirr, Stipes Publishing LLC, Champaign, IL
- 2) Dirr's Hardy Trees and Shrubs: An Illustrated Encyclopedia, 1997 by Michael A. Dirr, Timber Press, Portland, OR
- 3) Muenscher's Keys to Woody Plants: An Expanded Guide to Native and Cultivated Species, 2001, by Edward A. Cope, Comstock Publishing Associates, a division of Cornell University Press, Ithaca, NY
- 4) The Pronouncing Dictionary of Plant Names, 2006, by American Nurseryman Publishing Co., Chicago, IL.

*You will also need a clipboard, clear cover sheet to protect from rain, and quality pencils to write with for each lab. Do not write in pen, as it will run in the rain. A digital camera to take pictures of the plants will be very helpful to you. Your weekly quizzes must be written in pencil only, NOT pen.

Course Objectives: At the completion of the course, the student will be able to:

- 1) Understand basic taxonomic tools needed for plant identification, including classification, vegetative and reproductive morphology, and nomenclature of cultivated plants
- 2) Recognize many woody ornamental trees, shrubs, groundcovers, and vines, both native and exotic, by family, species (genus and specific epithet), variety, cultivar, and sometimes trademark
- 3) Discuss plant identification, distribution, ornamental characteristics as well as undesirable features, culture, adaptability, and uses

- 4) Select plants for specific purposes and site conditions
- 5) Acknowledge appropriate reference material and guides for identifying plants
- 6) Appreciate the great diversity and beauty of woody ornamental landscape plants

Class Format:

Lectures: Consist mainly of culture and use lectures, (no id as that is covered on lab quizzes) featuring PowerPoint presentations and discussion of the previous week's plants. I do not pass out my PowerPoint lecture handouts. Course information will be made available on the course's [Learn@UW](#) website.

Labs: Consist mainly of outdoor labs, half on campus (Tuesdays) with the other half at the Longenecker Horticultural Gardens at the UW Arboretum (Thursdays only with one Tuesday). **Please dress accordingly, as we will go outside rain or shine and regardless of temperature!** Classes will NOT be canceled due to rain, cold, or snow. Remember, we are outside for 2 hours for labs so dress accordingly and make sure you wear gloves and warm shoes!

Please try to arrange for your own transportation to the arboretum. There is no bus route that goes to the arboretum visitor's center. Ride your bike or car pool with someone. There is free parking at the arboretum! Please don't be late in your arrival, as we will start the day's lab as soon as the class time starts at the arboretum and you may not be able to locate us once inside the gardens. The arboretum provides you with a larger selection of plants that are healthier than campus plants and offers a nice break during the day away from campus. Occasionally, labs may go a bit long. I highly suggest that you don't have a class right after this one starting at 3:30 as you may be late in your arrival due to traffic, weather, etc. coming back from the arboretum.

Grading:

	<u>% of final grade</u>
Weekly plant identification quizzes (12), 10 will count	35%
Written exams (3), Oct. 1, Nov. 5, Dec. 8 (day), 14% each exam 4:30-7:00 p.m. (for Oct. 1 and Nov. 5 exams only)	42%
Final exam: location, TBA Mon., Dec. 15, 5:05-7:05 p.m. (night exam indoors)	18%
Class attendance, citizenship, and participation in final sample collection	5%

<u>Grading scale:</u>	≥ 92 = A	*Grading scale is in accordance with UW-Madison procedures
	88-91 = AB	
	82-87 = B	
	78-81 = BC	
	70-77 = C	
	60-69 = D	
	< 60 = F	

*Landscape Architecture majors must obtain at least a grade of 70% (C) in the course, or you will have to take the class over to qualify for the landscape architecture major.

Quizzes: Weekly identification quizzes are **cumulative** and will be given on Tuesdays on campus each week. There will be a total of 12 quizzes and you can drop the lowest two. These weekly quizzes serve as a helpful guide for your success in the course. They are not intended to burden you but rather keep you up-to date so exams will not be as fearful. There will be only 5 plants per quiz (worth 5 points each for a total of 25 points). The first quiz will be on material I have covered the first labs and lecture with the remaining quizzes on plant id only.

Quiz Grading: Excluding the first quiz on plant nomenclature and morphology, students will be asked on identification quizzes to identify five plants with the family (1 point), genus (1-1.5 point), and specific epithet (1-1.5 point) with the appropriate variety or cultivar, if required (1 point), in addition to the common name (1 point). All plants are worth 5 points for a total of 25 points. Spelling, underlining, and proper citation of Latin names will be also graded (minus 0.5 points per error per word). Quiz plants will be given as actual plants growing on campus or occasionally as a cut twig specimen.

Written Exams: These three exams will **not** be identification, but will highly emphasize use and culture of each plant along with material covered in lectures. Learning a plant's cultural requirements is **JUST** as important in learning how to identify it. Mastery of this material will be critical in your future career.

What's On The Written Exams: They are also **cumulative** and will be given three times during the course in the classroom. Students will be asked to relate material covered in plant walks to real-life situations, i.e. plant culture, use, form, characteristics, ornamental qualities, if it is native to WI, important cultivars, etc. Review plant cultural and ornamental characteristics early and often during the semester. Don't wait till the night before the exam to study! There are no identification samples on the classroom written exams. The questions on the written exam are very representative of the kind of questions you will receive once employed, regardless whether you are a landscape architect or a horticulturist. This information is **REQUIRED** by **MANY** employers, both landscape architecture and horticultural firms! How can you create aesthetically pleasing, environmentally-friendly, long lasting, sustainable landscapes without knowing what each plant requires for it to live and grow successfully? The best landscapes are those that are alive and thriving after 5, 10+ years.

Make-up exams: Make-up lab identification quizzes will **NOT** be given by the instructor or teaching assistant, no exceptions! You can drop your lowest two quiz grades. Please contact me BEFORE the in-class, written exams if you cannot make the written exam date. Acceptable reasons for missing the written exam date are death in the family, accident, or proof of illness.

Final exam: This exam will be indoors using live, cut twig specimens and will be representative of plants covered during the entire semester. There is no culture, use, etc. on the final, **JUST ID.** There will be a list provided at the END of the semester of what plants could be covered on the final, which will be around 190 possible plants, with only 50 plants on the actual final exam and two bonus plants. Each student will be placed next to one plant and allowed to write down the family, scientific, and common names, with the same points used on the quizzes. This exam will be identification of cut specimens/twigs of plants/fruit, not whole plants. This format is different from the outdoor weekly quiz format because:

- 1) December is very cold and I do not want you to spend 2-3 hours outdoors for the final.
- 2) Many of you will receive plant samples or digital photos from clients for identification and you will need sufficient practice in how to identify them from cut samples; rarely does a client bring you the whole plant.
- 3) We can cover more plants on the final indoors so if you miss identify several of them, it won't penalize your final grade as much as if we had only 20 plants on the final exam outdoors.
- *4) Many woody plants do not have leaves for 6 months during the year so it is important to learn bud, twig, and fruit characteristics on a regular basis.

Don't wait till the end of the semester to learn bud and twig id! This is YOUR responsibility. I will NOT be collecting all the plants for your review for the final! Each student will be assigned plants to collect.

Final Exam Plant Collection Requirement: Each student will be required to collect around 5-7 samples with labels for classmate's review. These final exam samples are best collected during the first week of December and will be due to ME by Mon, Dec. 8 so I can check you off the list, no exceptions as we will use these samples in class that following week. This collection will require total class participation for success. We will have a sign up sheet toward the end of the semester of what specific plants you should collect so students don't collect the same plants. Use only the by-pass type of pruners to collect samples for your final exam review. Do **NOT** rip the twigs off of the plants and **DO NOT** use scissors or a knife, as they do not provide a clean cut! You can cause a lot of damage to plants by this careless behavior. Improper cuts or rips on branches can lead to infection by pests and disease on woody ornamentals. Store each of your samples that you collect for the final separately in 1 quart size, zip lock bags, label the bags with a sharpie with the complete scientific, common and family names, and place bags in the refrigerator, as they will last a lot longer. Samples should be around 6" long and include the fruit, if available. If you don't collect your samples, you will be marked down on your grade. If the samples are misidentified by you or are poor, I will ask that you recollect the samples.

Academic honesty required: Cheating on quizzes/exams will **NOT** be tolerated at anytime. Students caught cheating will receive an automatic zero for that test and the student will be subjected to further disciplinary action at the university level. Be responsible and professional, don't cheat!

Policy on attendance: All students are expected to attend all scheduled lectures and labs for successful academic performance in this course. An excess of 3 or more unexcused absences will indicate a lack of interest, hence, your final grade will be affected since class attendance, citizenship, and participation count for 5% of your final grade. Missing labs is especially troublesome as this is where you see the plants and are able to touch them, i.e. your learning is decreased significantly if not there.

There is no smoking or tobacco chewing allowed in the classroom or in outdoor labs. Please respect this and do NOT smoke! **Cell phones and texting are also NOT allowed in lecture or labs. All cell phones must**

remain off during lectures and labs as they could be potentially used for cheating. If a phone goes off in class, you will get a warning, after that, your phone will be taken away from you until later. Cell phones can be very disruptive and are disrespectful to your classmates and instructors. Since Wisconsin passed a concealed hand-gun law, hand guns are NOT permitted during ANY class time whether on campus OR at the arboretum. NO EXCEPTIONS!

*If you are taking this class for audit, please see me. You are expected to take the quizzes and final.

***This class is a 3-credit course that has 5.25 contact hours a week. It is often said in academia that for every 1 hour you spend in the classroom, you will need to spend 3 hours in homework time, therefore, you should spend between 12-15 hours a week studying the plant material in order to do well in the course. This is YOUR responsibility! I cannot take the blame for your poor performance or grades! Each and everyone one of you CAN earn an A in my course, you just need to apply yourself on a weekly basis and enjoy learning many new woody plants. Don't wait until the midterm if you are having problems learning the plants. Please contact me as soon as possible for help. **Studying for exams will be much easier with a good attitude and weekly preparation! Get a study buddy(s) right away and meet with them weekly! Don't get behind! Make your learning experience fun!** ☺

***If you have any problems, questions, or learning disabilities, please see me at once. I am more than willing to work with students to help them learn the wonderful world of plants ☺

*If you are wondering what other woody plant identification course are like at other universities:

Iowa State University: 10 week course, fall (216 plants); 5 week course, spring (79 plants)

University of Illinois: 15 week course, approximately 200 plants

Michigan State University: 15 week courses, 392 plants (fall); 265 plants (spring) (combined with herbaceous)

University of Minnesota: 15 week course, 220 plants

University of Georgia: approx. 250 plants each in 10-week courses (fall and spring)

North Carolina State University: 15-week courses, 273 plants (fall); 275 plants (spring)

As you can see, we cover a similar amount of plant material in this course as other universities' plant id courses. The number of credit hours for the courses at the above universities ranges from 2-4 credits. The goal of my course is to prepare you for working in the green industry. **You will need to know these plants in order to be competitive, well respected in your field and to be thought of as a professional. Most employers want and NEED to hire employees with good knowledge of plants, both woody AND herbaceous!** I highly recommend taking the Herbaceous Ornamental Plants course, Hort 234, offered every fall semester.

***Longenecker Horticultural Gardens at the University of Wisconsin Arboretum is looking for volunteers for maintenance of the gardens. Volunteering at the gardens would provide you excellent experience in woody ornamentals and the job experience would look great on a resume! I will provide you with extra credit if you work at least 25 hours specifically in Longenecker Gardens (not the rest of the arboretum) this fall. Contact Ken Zuba at the arboretum for information (263-7888). The primary months volunteer help is needed is April-Nov. You will also learn many new plants in a fun working environment!