

HORT 308 LANDSCAPE PLANT MATERIALS

Course Syllabus, Spring 2009

Instructor: Dr. Michael Aloysius Arnold (<http://aggie-horticulture/faculty/arnold.html>)
Lecture: HFSB 102, Monday and Wednesday, 11:30 AM - 12:20 PM
Laboratories: Section 501, *Nursery/Floriculture Field Lab, Tuesday, 10:00_{AM} - 12:00_{PM}
Mr. Andrew King assisting.
Section 502, *Nursery/Floriculture Field Lab, Tuesday, 1:00_{PM} - 3:00_{PM}.
Ms. Bhavana Viswanathan assisting.
Section 503, *Nursery/Floriculture Field Lab, Tuesday, 3:00_{PM} - 5:00_{PM}.
Ms. Bhavana Viswanathan assisting.
Section 504, *Nursery/Floriculture Field Lab, Wednesday, 1:00_{PM} - 3:00_{PM}.
Mr. Andrew Cartmill assisting.
Section 505, *Nursery/Floriculture Field Lab, Wednesday, 3:00_{PM}-5:00_{PM}.
Mr. Andrew Cartmill assisting.

*Note that most laboratory sessions will meet in temporary classrooms at the TAMU Horticultural Gardens. However, laboratories may meet in several locations including HFSB (see a campus map) and FSLB on some occasions. Laboratory locations will be announced in preceding lectures or laboratory sessions. These alternative laboratory locations are necessary for students to obtain first hand observations of live plant specimens. If no location is announced students should report to the Nursery/Floriculture Field Lab at the TAMU Horticultural Gardens for that week's laboratory.

Offices and telephone numbers:

Dr. Michael Arnold, HFSB 207, 845-1499, Home telephone number is 690-0265, *emergencies only*, not after 8:00_{PM} nor before 7:00_{AM}.

Mr. Andrew King, Temporary classrooms at the Horticulture Garden, office hours and contact information to be announced during his first laboratory period.

Mr. Andrew Cartmill, HFSB 410, office hours and contact information to be announced during his first laboratory period.

Ms. Bhavana Viswanathan, HFSB 411, office hours and contact information to be announced during her first laboratory period.

Messages:

Messages may be left in Dr. Arnold's or the lab instructor's mailboxes in HFSB 201, 979-845-1499, or via email for Dr. Arnold at ma-arnold@tamu.edu.

Office Hours:

Office hours for Dr. Arnold will be held for one hour prior to each lecture, 10:30_{AM} - 11:30_{AM} Monday and Wednesday, or by appointment (979-845-1499 or ma-arnold@tamu.edu).

Office hours for Mr. Cartmill, Ms. Viswanathan, and Mr. Langford will be announced during their first laboratory periods.

Course Description:

HORT 308. Landscape Plant Materials. (2-2). Credit 3. II. Identification and use of indigenous and introduced landscape plants; plants for special uses in urban environments; emphasis on plants' ornamental attributes, cultural requirements, and adaptability in urban and suburban environments. Prerequisite: HORT 201, or HORT 306, or BOTN 101 or approval of instructor.

Course Objectives: Students will be expected to develop understanding and skill in the following areas:

- (1) Identification of selected landscape plant species on the basis of leaf, stem, fruit, flower, dormant twig, bark and whole plant characteristics.
- (2) Ecological roles of selected plants in cultivated landscape environments.
- (3) Basic knowledge of ornamental characteristics and environmental adaptability of important native and introduced plant species relating to their use in specific landscape situations.
- (4) Correct usage of scientific names and terminology to describe plant taxa.
- (5) Develop a working knowledge of potential limitations and hazards associated with the use of certain plant species in the landscape.
- (6) Ability to obtain cultural and descriptive information on plant materials from literature and human resources.

Lecture:

No electronic devices (laptop computers, palm pilots, raspberries, translators, calculators, cell phones, etc.) may be used during any lectures, exams, quizzes, or laboratory quizzes unless specifically requested in advance by student services on the student's behalf or approved by the instructor.

Examination Procedures:

Course grade:

Each student's grade will be based on a total of 2400 points for the semester. A standard grading scale will be utilized. However, the instructor reserves the right to curve individual exam or course grades upward if an individual or the class performance warrants such action. In no case will the curving of grades result in a worse grade than was earned using the standard scale enumerated herein. Do not count on a curved grading scale for the course. After teaching plant materials courses for over fifteen years, the instructor has curved only three exams. In order for an individual grade to be considered for curving up to the next highest grade, a student must be within 1% (24 points) of the next highest grade and have not missed more than two labs and/or lectures (as evidenced by missed examinations, lecture quizzes, lab quizzes, or bonus point opportunities). If the student has missed more than two labs and/or lectures, then their grade will not be eligible for curving up. This will apply to both excused and unexcused absences.

The tentative grading scale for the course is:

2160 (90%) to 2400 points (100%) = A
 1920 (80%) to 2159 points (89.9%) = B
 1680 (70%) to 1919 points (79.9%) = C
 1440 (60%) to 1679 points (69.9%) = D
 0 (0%) to 1439 points (<60%) = F

Point breakdown by grading testing instrument:

<u>Instrument</u>	<u>Points</u>	<u>Approximate % course total</u>
Lecture exam I	250	10.4 %
Lecture exam II	250	10.4 %
Lecture quizzes	200 (20 each)	8.3 % (0.83% each)
Lecture final	<u>500</u>	<u>20.8 %</u>
<i>Lecture subtotal</i>	<i>1200</i>	<i>50 %</i>
Laboratory quizzes (9 of 11 required)	900 (100 each)	37.5 %
Laboratory final	<u>300</u>	<u>12.5 %</u>
<i>Laboratory subtotal</i>	<i><u>1200</u></i>	<i><u>50 %</u></i>
<i>Course total</i>	<i>2400</i>	<i>100 %</i>

Lecture:**Lecture Exams:**

Lecture exams will emphasize ornamental/horticultural information concerning growth habit, ecological considerations, ornamental and cultural attributes, origin, availability and commercial value and use of selected plant taxa in the landscape. Lecture exams will encompass materials presented in lecture, reading assignments in the textbook or from the class website, and handouts. Students are expected to have read the sections of the required text relating to the topics and species covered in lecture. Weekly plant lists will be provided as handouts in lecture or posted on the class website (<http://aggie-horticulture.tamu.edu/syllabi/308/home/frame.htm>). All taxa covered will be fair game for the lecture exams. Only the indicated taxa for laboratories (about 20 new taxa will be added each week to the cumulative total) will be covered on laboratory identification quizzes. Lecture exams will be cumulative, but emphasize the material covered since the previous exam. Lecture exams and the lecture final will consist of multiple choice, fill in the blank, lists of requested information, true/false, matching, labeling, design suggestions and/or short essay questions. The lecture final will generally be more comprehensive in nature than the first two lecture exams. ***No cell phones, computers, translators, or other electronic devices are allowed during any lecture or lab examination or quiz. All work is expected to be independent, no group work is allowed unless expressly permitted by the instructor.***

Three lecture exams will be given on the tentative dates indicated below:

Exam 1 = 250 points. Monday, February 23, 2009, in class.

Exam 2 = 250 points. Monday, April 6, 2009, in class.

Final = 500 points. Wednesday, May 13, 2009, 10:30 AM - 12:30 PM.

Lecture Quizzes and Take-Home Assignments:

Past tracking of students' attendance at lecture and their performance on exams consistently indicated that good attendance tended to equate with good exam scores. Hence, ten unannounced quizzes and / or short take-home assignments will be made at the instructor's discretion during the semester. Each quiz / assignment will be worth 20 points each (200 total points for the ten quiz / assignments) toward the final semester point total. Students must be present to take the quiz or personally hand in the assignment. Students are not permitted to take extra copies of, or make copies of, take home assignments for fellow students who are not present during the day the assignment or quiz was made. Take-home assignments must be turned in at the beginning of the next lecture (or other date and time as specified by the instructor). ***Late quizzes and assignments will not be accepted.*** Quizzes will be based on questions from the previous lectures, assigned readings, or students will be asked to apply acquired skills and knowledge in problem solving scenarios. Assignments will be made that will enhance information gathering skills, incorporate current events into the course, or integrate plant materials use with landscape / interiorscape design concepts. A medical excuse, as defined in the university handbook, or a field trip or function that is a university approved absence are required to avoid zero points on missed quizzes or assignments. The excused absences must be on the official university approved absence list, not just a note from another instructor. *If another instructor wishes to request consideration for excusing students from lecture or laboratory sessions in HORT 308 to attend field trips or other activities for another class, approval must be requested in writing and approved by the HORT 308 instructor in advance of the activity. The activity must be on the official university list or approved by the HORT 308 instructor in advance of the activity before the excuse will be considered valid. Unexcused absences during quizzes or assignments will result in a score of zero points for that quiz or assignment.* Students are not requested by the HORT 308 instructor to miss time from other classes' lectures or laboratories, the same consideration is expected related to removal of students from the HORT 308 lectures and labs. ***All work is expected to be independent, no group work is allowed unless expressly permitted by the instructor.***

Laboratory: Announced Quizzes:

Eleven weekly plant identification quizzes will be given beginning the second week of classes. Each quiz will be worth 100 points. Each individual's best 9 quizzes (of 11 possible) will count toward the final grade. The two dropped quiz grades are to allow for the possibility of an absence during a laboratory quiz, whether the absence is excused or not. Unexcused absence during a quiz will result in zero points for that quiz. Excused absences in excess of the two drop quizzes must be obtained prior to the quiz or an official medical doctor's excuse from the student health center on campus will be required to be presented to the course instructor (Dr. Arnold) within 24 hours of the quiz. If additional excused absences are approved, the 900 point total for quizzes will be based on the average performance achieved on those quizzes that were taken. Prorated quiz grades will be assigned for students only if there have been three or more excused absences for laboratory quizzes. If more than four total excused or unexcused quizzes are missed, an incomplete may be assigned for the course at the instructor's discretion.

The first quiz will test your knowledge of the correct writing of scientific and common names of plants and identification of morphological traits of plants discussed in the initial laboratory and assigned lecture readings. Each of the succeeding quizzes will consist of 10 plants or cuttings (10 points per plant). Students will be expected to know the scientific (family, genus, specific epithet, and subtaxa if covered; 8 points) and common name (2 points) of each plant species (10 points total). Each misspelled word will

count one point off. Leaving off appropriate punctuation (single quotes, hyphens, periods, etc.) counts as a spelling error.

Bonus plants may be added to quizzes at the discretion of the laboratory instructors, if in their judgment adverse weather conditions or other factors have made identification of the regular 10 plants or cuttings difficult. Bonus plants can only be used to increase students' quiz totals, not decrease them. *Note that the same species/cultivar may occur more than once on a given quiz. Quiz material is cumulative throughout the semester.* In addition to the names of plants that we have formally covered in laboratories, bonus questions may include family names or the genus name for a closely related species to those that we have formally studied in laboratory.

Laboratories and quizzes will be held rain or shine, so dress appropriately and bring pencils (ink will run if wet). Cuttings and/or potted specimens of the species covered for the week will be placed in the temporary classroom at the TAMU Horticulture Gardens prior to the first laboratory each week. These specimens will be retained in the classroom or the greenhouse at the gardens for the remainder of the work week and one additional work week (assuming the specimens remain intact). After this time students will need to go to the greenhouse, nursery or landscape locations of the specimens to study them or access the plant images on the Plant Picture Pages section of the class website. Laboratory instructor's decisions on laboratory quizzes are final. Print legibly (print, no script), illegible answers count as incorrect answers.

Laboratory grading for scientific and common names on laboratory quizzes:

Each plant is worth 10 points, which are awarded as follows:

Straight species;

Aceraceae	<i>Acer rubrum</i>	Red Maple
1	4 3	2

Subspecies, variety, or forma of a species;

Bignoniaceae	<i>Chilopsis linearis</i> subsp. <i>arcuata</i>	West Texas Desert Willow
1	4 2 1	2

Malvaceae	<i>Malvaviscus arboreus</i> var. <i>mexicanus</i>	Giant Turk's Cap
1	4 2 1	2

Caprifoliaceae	<i>Viburnum plicatum</i> f. <i>tomentosum</i>	Doublefile Viburnum
1	4 2 1	2

Cultivar of a species;

Bignoniaceae	<i>Chilopsis linearis</i> 'Dark Storm'	Dark Storm Desert Willow
1	4 2 1	2

Cultivar of a subspecies, variety or forma;

Fabaceae	<i>Gleditsia triacanthos</i> var. <i>inermis</i> 'Skyline'	Skyline Thornless Common Honeylocust
1	4 1 1 1	2

Common names must include all words in the common name in the correct order to receive credit for the common name.

One point will be deducted for each misspelled word, total points will not go below zero.

Leaving out the “×” on intergeneric hybrids, “×” on intrageneric hybrids, or single quotation marks on cultivars counts as a 1 point spelling error each.

Leaving out the subtaxa designations (“subsp.,” “var.,” or “f.”), or indicating them improperly, counts as a 1 point spelling error.

Laboratory Final:

The lab final will each consist of 30 potted plants or cuttings, with each plant being graded as described on the quizzes. The lab final will be worth 300 points toward the final grade. The lab final will be given during the last regularly scheduled lab periods. Decisions on the lab final by the laboratory instructors are definitive. Be aware that the laboratory final will likely include a greater proportion of the plants from the last few plant lists than from the first ones as these latter lists contain the material that has not been as thoroughly tested at that time.

Laboratory final exams will be given on the tentative dates indicated below:

Final = 300 points. Tuesday April 28 or Wednesday April 29, 2009, during lab period.

Makeup Policy:

Makeup examinations or lecture quizzes (see quiz section) will be granted only for excused absences (prior approval of the instructor, excuse from the student health center, or verifiable medical doctor's excuse if the student is out of town, student generated excuses will not be accepted). Two opportunities for dropped lab quizzes are provided during the laboratories. ***Makeups for lecture exams must be scheduled within twenty four hours of the originally scheduled exam time.*** Failure to contact the instructor (Dr. Arnold) within this twenty four hour period with a valid medical excuse will result in a zero for that examination, exceptions will be granted only if hospitalization is required.

Required Textbook:

Arnold, Michael A. 2008. *Landscape Plants for Texas and Environs, Third Edition*. Stipes Publishing L.L.C., Champaign, IL. p. 1334. ISBN 1-58874-746-8. (available at the University Bookstore on main campus, other local bookstores, or on the web at <http://www.stipes.com/> or <http://amazon.com/>). Use of this textbook for HORT 308 has been approved by the Head of the Texas A&M University Department of Horticultural Sciences.



Supplementary lecture materials:

Official plant lists will be posted on the HORT 308 class home page accessible at <http://aggie-horticulture.tamu.edu/syllabi/308/home/frameset.htm>, these will be the official lists of plants covered during the semester. Copies of the lecture presentations are available on the same web site as PowerPoint presentations. Color images and a synopsis of critical plant characteristics may also be available on the

Plant Pictures Pages. Taxa can be accessed via this searchable data base. One way that the plants can be accessed is by list (week) of coverage in HORT 308 on the search page. I will try to keep these updated during the semester. Any additional reading materials will be provided as linked pdf files on the course website. The above materials all carry the same copyright reservations as materials presented in the text and syllabus.

Laboratories:

Laboratories will be conducted as on-campus field trips during the laboratory periods. We will walk to landscape locations of plant materials on or near the Texas A&M University campus. Labs will originate from either the Nursery / Floriculture Field Lab at the Texas A&M University Horticultural Gardens, the Floriculture Greenhouses on main campus, or the Horticulture/Forestry Sciences Building. Dress for mild hiking conditions (long pants, hiking boots or tennis shoes, and appropriate coats, gloves, raincoats, etc. for cool or wet weather). Students will be notified of where the labs will meet in lecture or the previous lab, if no notification is given the labs will meet in the temporary classroom at the Texas A&M University Horticultural Gardens. All work is expected to be independent.

A map to the Horticultural Gardens is available at:

<http://aggie-horticulture.tamu.edu/greenhouse/hortgardens/directions.html>

Attendance:

Attendance in both lecture and laboratory is mandatory. Due to the nature of the material, slides and fresh plant samples, it is necessary for students to attend lectures and labs. Unexcused absences (without prior approval of the instructor or a doctor's excuse from student services or a verifiable medical doctor's excuse if you are out of town) during quizzes and exams will result in zeros for that quiz or exam. ***Students are expected to attend the laboratory section in which they are officially enrolled,*** unless prior permission is obtained from both the course instructor (Dr. Arnold) and the laboratory instructor(s) involved. See the sections on laboratory quizzes, lecture quizzes/assignments, and exam policies for information specific to attendance and these examination procedures. ***Use of personal computers is not permitted during lectures or laboratories,*** unless such use is documented as needed by disability services. The available desktop is too small so screens obscure views, computers can distract the user and surrounding students during lecture, and the typing can be annoying. ***Cell phones should be turned off during lectures and laboratory periods. If a person's cell phone rings, they are expected to turn it off or leave. No text messaging is permitted during class. Audio or video recording or transmission of lectures or laboratories in any manner is prohibited.*** Students are permitted to take pictures of the plant specimens in laboratories, but audio or video recording of labs is not permitted and unwanted photographing of laboratory instructors or fellow students is prohibited.

Cheating and Plagiarism:

“An Aggie Does Not Lie, Cheat or Steal or Tolerate Those Who Do.” ***Cheating in any form during quizzes, take-home assignments, or exams, will result in a zero for that examination and possible other disciplinary actions up to and including expulsion per current TAMU Student Rules.*** Students observed giving or receiving answers during a quiz, exam, or assignment will receive a zero on that examination instrument. In the event of a repeat offense, an F will be assigned for the course. Copying or plagiarism (including failure to cite sources) on the assignments will result in a zero for the assignment. ***Cheating and plagiarism defrauds the instructor and fellow students, is a violation of the TAMU honor***

code, and will not be tolerated. In compliance with TAMU policy, all infractions will be reported via the Aggie Honor Code system (<http://www.tamu.edu/aggiehonor/>) and may result in more severe disciplinary actions than outlined above. Resources for students to clarify what is cheating, plagiarism, or academic dishonesty can be accessed on the web at <http://www.tamu.edu/aggiehonor/student.html>.

Suggested Inclusions from Speaker of the TAMU Faculty Senate:

Copyright / plagiarism statement:

"The handouts used in this course are copyrighted. By "handouts", I mean all materials generated for this class, which include but are not limited to syllabi, quizzes, exams, lab problems, in-class materials, review sheets, and additional problem sets. Because these materials are copyrighted, you do not have the right to copy the handouts, unless I expressly grant permission.

As commonly defined, plagiarism consists of passing off as one's own the ideas, words, writings, etc., which belong to another. In accordance with this definition, you are committing plagiarism if you copy the work of another person and turn it in as your own, even if you should have the permission of that person. Plagiarism is one of the worst academic sins, for the plagiarist destroys the trust among colleagues without which research cannot be safely communicated.

If you have any questions regarding plagiarism, please consult the latest issue of the Texas A&M University Student Rules, under the section "Scholastic Dishonesty".

Americans With Disabilities Act (ADA) Policy Statement:

"The Americans with Disabilities Act (ADA) is a federal antidiscrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact the Department of Student Life, services for students with disabilities in Room 126 of the Koldus Building, or call 845-1637."

Study Hints For HORT 308:

- Learn to identify approximately 25 to 30 species covered each week within the week that they are covered. This will not only enhance performance on lab quizzes, but reinforce the lectures with the identification features of each species.
- Copies of lecture slides (PowerPoint format) will be available on the class website (<http://aggiehorticulture.tamu.edu/syllabi/308/home/frameset.htm>) along with the course syllabus; other plant materials information is also available on the Plant Picture Pages (<http://landscapeplants.tamu.edu/index.html>).
- Go back and review what the twigs of deciduous plants look like after they loose their leaves in the fall or as the leaves expand and mature in the spring.
- Make flash cards with the species' common name and identification features on one side and the scientific name on the other side to aid identification skills and to learn the correct spelling of scientific and common names.
- Make lists of species with similar cultural, ornamental, ecological, and identification characteristics.
- Pay attention to family names, they are often clues to distinguishing among broad categories of species and provide hints on ecological requirements of unfamiliar taxa.
- Organize a study group. Students who participate in study groups and routinely attend lectures and labs consistently earn better grades.
- Study the specimens provided in the laboratories in a timely manner. Fresh specimens can deteriorate rapidly in hot weather (this can be a particular problem early in the fall semester or late in the spring).

- Do not wait till the last minute to study. This course contains much information and the plants take time to learn. It can be likened to learning a foreign language, if you keep up it is easy, if you once fall behind it is very difficult.
- There is a great deal of information to learn about the individual taxa in addition to the general concepts. Learning this detailed information is critical to proper use of the plants in landscape designs, however, it is often useful to think about what are the general characteristics or requirements for the majority of trees and shrubs. Then emphasis studying how an individual taxon differs from the “typical shrub or tree” for a give group. For instance, most trees and shrubs will grow well in a moist well drained slightly acidic fertile soil. Now for instance with most *Rhododendron spp.*, one must have moist well drained acidic soils or they develop micronutrient deficiencies, hence they have an absolute requirement rather than being adapted to a broader range of soil conditions. Conversely, with Texas Mountain Laurel, *Sophora secundiflora*, plants have a tolerance for alkaline soils, but will also work on the more ideal soils which *Rhododendron spp.* inhabit. This tolerance to a particularly challenging soil condition would be important to remember. Similar typical versus atypical traits and responses can be envisioned for other plant characteristics. Essentially, remember what makes a given taxon unique, either good or bad, plus or minus in use or adaptation.
- Spend time outside the lab and lecture periods studying the plants, it takes time, there is no substitute for hard work! It is expected that students will spend two to three hours outside of class or lab for each hour spent in lecture or lab. The garden classroom and greenhouse is open weekdays from approximately 8:00 AM to 5:00 PM and sometimes the hours extend past those times. Please keep in mind that specimens will be cleared out for room cleaning and returned to the greenhouse, nursery, or storage cooler Friday afternoon so that they will be in good shape for Monday morning. Students are welcome in the lab any time during the work week that there is not a formal laboratory session underway in the room. The outdoor plantings at the TAMU Horticulture Gardens are open seven days a week, 365 days a year, during daylight hours.

Bonus Point Opportunities:

- As described under quizzes and attendance sections.
- Bonus questions may be included on some exams.
- Plant Materials Games will be held during one or more lecture periods.
- Students must be present, whether an absence is excused or not, to receive credit for bonus points. These are meant to be an extra incentive to students who are actually in attendance and are not a part of the required examinations for the course. Missing these however does document an unexcused absence if a medical or other excuse deemed valid by the instructor is not available for that day.
- Bonus points during lecture and laboratory often total 5 to 10% of the total points for the course. This means there is a potential for a built in 5 to 10% curve that can be earned throughout the semester. These points are only available to those in attendance during that period, regardless of if it is an excused absence or not. Bonus points must be earned and are another mechanism to encourage attendance and participation.

Extra Credit Work:

- *Extra credit work will not be assigned, put your efforts into the assigned work.*

-----Detach along dotted line-----

Acknowledgment of the terms of this class as stated in the above syllabus

I, the undersigned, acknowledge that I have read and understand the terms of this HORT 308 course syllabus (as stated in the preceding syllabus) and that I agree to abide by the terms of this syllabus. All terms of this syllabus are subordinate to published TAMU policies and all federal, state, and local laws and ordinances. Subordination of one or more clauses in this syllabus does not render the remaining ones unenforceable.

Print your name: _____

Sign your name: _____ Date _____

**HORT 308
Permission to Post Grades, Spring 2009
(optional)**

If you wish to have your grades posted on the class website for HORT 308 using a code you provide, then please sign the release below and provide a code. If you do not provide a code or do not sign for permission, your grades will not be posted.

I wish to have my grades posted on the HORT 308 class website during Spring Semester 2009 using the following code I have provided.

Print your Name: _____

Sign your Name: _____

Code to use when posting my grade (choose any combination of five letters and/or numbers, please avoid using your student ID, social security numbers, or other numbers that would personally identify you to others; please do not begin the code with a zero, if you do use a zero as the first digit in the code, it will be treated as the letter O).

Code: _____