HORT 308 PLANTS FOR SUSTAINABLE LANDSCAPES
Course Syllabus, Spring 2019

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, HFSB 110, Tuesday, 10:00 AM - 12:00 PM
Mr. Jonathan Caples assisting.
Section 502, HFSB 110, Tuesday, 1:00 PM - 3:00 PM.
Ms. Amanda Birnbaum assisting.
Section 503, HFSB 110, Tuesday, 3:00 PM - 5:00 PM.
Ms. Amanda Birnbaum assisting.
Section 505, HFSB 110, Wednesday, 3:00 PM - 5:00 PM.
Mr. Jonathan Caples assisting.

*Laboratory sessions will normally meet in 110 HFSB unless otherwise announced. Any alternative laboratory locations will be announced in preceding lectures or laboratory sessions or via official TAMU email accounts as indicated in Howdy. If no location is announced students should report to 110 HFSB for that week's laboratory. Laboratories will meet during the first week of classes.

Offices and telephone numbers:

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

Mr. Jonathan Caples, HFSB 418, office hours and contact information to be announced during his first laboratory period.

Ms. Amanda Birnbaum, HSFB 413, office hours and contact information to be announced during his 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 half hour prior to and after each lecture, 11:00 AM - 11:30 AM and 12:30 PM - 1:00 PM Monday and Wednesday, or by appointment (979-845-1499 or ma-arnold@tamu.edu).
Office hours for Mr. Caples and Ms. Birnbaum will be announced during their first laboratory periods.
Course Description:

HORT 308. Plants for Sustainable Landscapes. Credit 3. 2 Lecture Hours. 2 Lab Hours. 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: BIOL 101 or BIOL 111 or BIOL 113 or HORT 201 or HORT 301 or LAND 101 or RENR 205 or approval of instructor.

Integration of Course Objectives with Student Learning Objectives of Undergraduate Horticulture Degrees and University Student Learning Objectives (SLO): Specific SLO addressed for the BA in Horticulture and BS in Horticulture degrees are identified for each major objective. University SLO addressed at indicated collectively after the enumeration of degree specific SLO. Students will be expected to develop understanding and skill in the following areas:

1) Identify horticultural plant characteristics and their uses (BA Horticulture SLO I.1 & 2; BS Horticulture SLO I.1-3; University Core Objectives: critical thinking skills and empirical and quantitative skills)

   Learn to identify, using scientific names, a working palette of herbaceous and woody landscape plants on the basis of their vegetative and reproductive morphology.
   Develop knowledge of design characteristics and environmental adaptability of important native and introduced herbaceous and woody species relating to their use in specific landscape situations.
   Understand the relationships among selected herbaceous and woody plants and their characteristics to maximize aesthetic effectiveness in landscape designs.

2) Integrate knowledge of movement of water, nutrients and energy through the biosphere and the resulting impacts on plant growth and physiology (BS Horticulture SLO II.1, 2, & 4; University Core Objectives: critical thinking skills and empirical and quantitative skills)

   Develop an understanding of the interactions among environments conditions, particularly maximal, minimal and sequential effects of temperature exposures, deficiencies of nutrients, precipitation regimes, light exposures, and urban environmental constraints, on herbaceous and woody plant responses and management solutions in landscape design, installation and maintenance.
   Understand the relationships among soil pH, nutrient content and nutrient availability and their importance in the selection of appropriate herbaceous and woody taxa for landscape designs.
   Recognize importance of regional variation and changes in seasonal patterns of moisture availability in the selection of appropriate herbaceous and woody taxa for landscape designs.

3) Critically evaluate options for sustainable plant management, including natural, urban and engineered horticultural systems (BS Horticulture SLO III.1, 2, & 5; University Core Objectives: critical thinking skills and empirical and quantitative skills)

   Develop the ability to select and explain the reasons for the selection of appropriate herbaceous and woody plant taxa based on the intended use, desired design functions, and the environmental constraints at the intended site of incorporation of the design.
   Recognize environmental constraints to the production of selected herbaceous and woody plant taxa or their growth in nursery or greenhouse production and landscape environments.
   Understand the potential economic consequences and value associated with effective incorporation of herbaceous and woody plants in landscape designs and the potential for production practices, transportation, handling, planting, post-establishment cultivation and management decisions to impact these economic values.

4) Evaluate the role of plants and flowers play in human well-being (BA Horticulture SLO II.1 & 2; University Core Objectives: critical thinking skills, communication skills, and social responsibility)
Recognize the ecosystem services and benefits provided by various categories of herbaceous and woody plant taxa in landscape designs.

Be able to describe the interactions herbaceous and woody plants exhibit with their environments.

Develop an appreciation for the historical and social importance of various taxa of landscape plants.

5) Analyze and critique the principles and elements of design (BA Horticulture SLO III.1-3; University Core Objectives: critical thinking skills and communication skills)

Acquire the ability to explain how the incorporation of herbaceous and woody plant taxa contribute to the achievement of theoretical elements and principles of design in landscapes.

Recognize the importance of and opportunities provided by the individual herbaceous and woody taxa discussed for incorporating various elements of design in the landscape settings.

Analyze the contribution of various herbaceous and woody taxa to the aesthetic value and conceptual development of landscape designs.

6) Explain how care and handling affect horticultural crop quality (BA Horticulture SLO IV.3; University Core Objectives: critical thinking skills)

Understand and describe how nursery production decisions, establishment practices, and post-installation management decisions impact the economic value of landscape plants.

Collect, manage, analyze and interpret data (BA Horticulture SLO VI.1, 3, & 4; BS Horticulture SLO 2, 3, & 6; University Core Objectives: critical thinking skills, communication skills, and empirical and quantitative skills)

Develop skills in searching the published literature related to solving problems in the landscape and communicating these findings to colleagues and clientele.

Develop the ability to search the published literature to formulate a testable hypothesis to solve problems related to the use of landscape plants and execute a simple experiment to test the hypothesis.

Practice the application of qualitative and quantitative data to solving typical problems encountered in herbaceous and woody landscape plant production and utilization in landscapes.

Describe how growth rates and ultimate plant sizes impact possible design concepts.

Understand the importance of distinguishing among research based data, expert opinions, and various unreliable sources of information related to horticultural utilization of landscape taxa.

8) Communicate effectively in speaking and writing (BA Horticulture SLO VII.1 & 4; BS Horticulture SLO VI.1 & 4; University Core Objectives: communication skills)

Effectively communicate the reasons for your analysis of landscape challenges, plant selections, or maintenance recommendations orally or in writing using acquired horticultural knowledge from the literature, site analysis, or data collection.

Communicate the reasons for your decisions related to the selection and utilization of woody plant taxa in a clear, logical and professional manner using formats appropriate for professional and scientific audiences as well as the general public. For instance the use of scientific names for plants and technical terminology for plant morphology, physiology, taxonomy, and production, maintenance and inclusion of woody plants in landscape designs would be important communication skills for professional and scientific uses, while the ability to use common plant names and descriptions of practices for establishing plants without the use of scientific jargon would be important for communicating with the general public.

9) Demonstrate personal and social responsibility (BA Horticulture SLO IX.3 & 4; BS Horticulture SLO VIII.3 & 4; University Core Objectives: personal responsibility and social responsibility)

Develop an appreciation for the roles of herbaceous and woody landscape plants in providing design elements in sustainable resource efficient regional, national, and global landscapes. Students should be able to recommend suitable herbaceous and woody taxa for solving landscape
challenges in a range of conditions from those encountered regionally to broader applications on a national and international scale. Students will recognize the implications of choosing taxa that will present reduced potentials for adverse environmental and human impacts, such as invasive species tendencies, high resource requirements, or potentials for poisoning of non-target animals or humans. Students will gain an appreciation for the importance of ethical practices in landscape design and greenhouse or nursery production and maintenance of landscape plants.

Lecture:

Tentative Lecture Topics and Sequence of Coverage:

- Introduction to the course (Week 1)
- Sustainable concepts for plant utilization in built environments (Week 1)
- General terminology and definitions (Week 1)
- Plant hardiness and design issues (Week 1 and 2)
- Texas and USA regional environmental considerations (self study topic, week 2)
- Disease and pest implications for plant selection in our regional built landscapes (Week 2)
- Plant development and genetic variation impacts on plant utilization in built environments (Week 2)
- Landscape plants as design elements (Week 2 and 3)
- Tropical & Subtropical plants – recreating paradise, coastal ecosystem services, and summer flare (Week 3)
- Cacti, succulents, & related arid region taxa – water conserving plants for xeric landscapes (Week 4)
- Ornamental grasses, turfgrasses, & related monocots – from turfgrass to bananas, grasses in the landscape (Week 5)
- Bulbs, corms, tubers, & rhizomes (geotrophes) – more than just a breath of spring (Week 6)
- Groundcovers – unsung heroes for difficult sites (Week 7)
- Vines & climbers – versatile vertical exclamation points with numerous ecosystem services, how and why of which vines and where they fit in the built environment (Week 8)
- Cool season annuals – annual color is not just for summer and not just flowers in the winter landscapes (Week 9)
- Transition annuals – annuals for northern climates offer a cornucopia of color for our regional spring and fall displays including an opportunity to include many edible crops for dual purposes (Week 10)
- Warm season annuals – bringing out the toughest hombres for summer impacts in heat affected landscapes (Week 11)
- Herbaceous perennials – from traditional herbal and culinary perennials to the latest ornamental additions for living walls and green roofs, perennials offer unique colors, forms, textures and timing for year-round enhancement of built environments (Week 12 and 13)
- Water garden and wetland plants – once viewed as connoisseur garden plants, their contributions to essential ecosystem services in biofiltration, water detention, erosion control for rain gardens, bioswales, constructed wetlands, as well as traditional water features have gained recognition (Week 13)
- Overview of economic, social, and cultural considerations are incorporated throughout (Weeks 1-14)
- Semester wrap up and introduction to fall course (Week 14)
- Final (Week 15)
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 nearly twenty years, the instructor has curved only two exams. In order for an individual course grade to be considered for curving up to the next highest grade at the end of the semester, 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 unexcused missed examinations, lecture quizzes, lab quizzes, or bonus point opportunities). If the student has more than two unexcused absences from labs and/or lectures, then their grade will not be eligible for curving up. Individualized extra credit work will not be assigned, put your efforts into the assigned work.

The tentative grading scale for the course is:

<table>
<thead>
<tr>
<th>Points</th>
<th>Grade</th>
</tr>
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<tbody>
<tr>
<td>2160 (90%) to 2400 points (100%)</td>
<td>A</td>
</tr>
<tr>
<td>1920 (80%) to 2159 points (89%)</td>
<td>B</td>
</tr>
<tr>
<td>1680 (70%) to 1919 points (79%)</td>
<td>C</td>
</tr>
<tr>
<td>1440 (60%) to 1679 points (69%)</td>
<td>D</td>
</tr>
<tr>
<td>0 (0%) to 1439 points (&lt;60%)</td>
<td>F</td>
</tr>
</tbody>
</table>

Point breakdown by testing instrument:

<table>
<thead>
<tr>
<th>Instrument</th>
<th>Points</th>
<th>Approximate % course total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lecture midterm</td>
<td>250</td>
<td>10.4%</td>
</tr>
<tr>
<td>Lecture quizzes</td>
<td>550 (50 each)</td>
<td>22.9% (approx. 2.1% each)</td>
</tr>
<tr>
<td>Lecture final</td>
<td>400</td>
<td>16.7%</td>
</tr>
<tr>
<td><strong>Lecture subtotal</strong></td>
<td><strong>1200</strong></td>
<td><strong>50%</strong></td>
</tr>
<tr>
<td>Laboratory quizzes</td>
<td>900 (100 each)</td>
<td>37.5% (approx. 4.5% each)</td>
</tr>
<tr>
<td>Laboratory final</td>
<td>300</td>
<td>12.5%</td>
</tr>
<tr>
<td><strong>Laboratory subtotal</strong></td>
<td><strong>1200</strong></td>
<td><strong>50%</strong></td>
</tr>
<tr>
<td><strong>Course total</strong></td>
<td><strong>2400</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
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Lecture:

Lecture Exams:

Lecture exams will emphasize cultural, environmental and design information concerning growth habit, ecological considerations, ornamental and cultural attributes, origin, availability and commercial value and use of selected plant taxa in the built and transitional landscapes. 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 laboratory or posted on the class website.
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. The lecture midterm and the lecture final will consist of a variety of questions including 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 midterm exam. As an added incentive, if a student has earned a 90% or greater for their semester grade prior to everything but the lecture final, they are excused from the lecture final and an A will be awarded for the semester. If a student has earned an 89% to 90% for their semester grade prior to everything but the lecture final and has two or fewer unexcused absences, then that student is excused from the lecture final and an A will be awarded for the semester. Otherwise, all students are required to take the lecture final or it will count as a zero for an unexcused absence. **No cell phones, computers, translators, or other electronic devices are allowed during any lecture or lab examinations or quizzes. All work is expected to be independent, no group work is allowed unless expressly permitted by the instructor.**

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

- **Midterm = 250 points. Wednesday, March 6, 2019, in class.**
- **Final = 400 points. Tuesday, May 7, 2019, 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, eleven weekly quizzes and / or short take-home assignments will be made at the instructor's discretion during the semester. Each quiz / assignment will be worth 50 points each (550 total points for the eleven quiz / assignments) toward the final semester point total. These lecture quizzes will be not be cumulative, but encompass material covered since the last lecture quiz. This will give students an opportunity to assimilate the course information in "chunks" prior to testing on the cumulative midterm and final exams. Students must be present to take the quiz or personally hand in the assignment. One student may not hand in a quiz for another. In some cases these quizzes may be given as take-home assignments and must be turned in at the beginning of the next lecture (or other date and time as specified by the instructor). **All assignments are to be done individually unless you are directed otherwise by the instructor:** any collaboration on said quizzes or assignments unless you are directed to do so by the instructor will constitute plagiarism. Students are expressly forbidden from copying any quiz or assignment handouts for use by other students; no student is permitted to obtain a take-home quiz or assignment for another student; if students do so it will constitute cheating. **Late quizzes and assignments will not be accepted unless specified by the instructor.** 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 from TAMU student health services or a qualified medical doctor, prior approval to be absent by the instructor, or an official university approved event absence is required to avoid zero points on missed quizzes or assignments. **Self explanatory excuses for illness are not accepted. The excused absences for other reasons must be on the official university excused absence list or an excuse from a medical doctor, 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.

Laboratory:
Announced Quizzes:

Eleven weekly plant identification quizzes will be given beginning the second full week of classes. Each quiz will be worth 100 points. The first nine quizzes are required. The remaining two quizzes are intended as make-ups for excused absences during the prior nine quizzes. In the event that a student has not had two or more excused absences from the first nine quizzes, that student may take one or both of the make-up quizzes and use them to replace their lowest respective scores on the first nine quizzes. Thus, each individual's best 9 quizzes (of 11 possible) will count toward the final grade. Unexcused absence during a quiz will result in zero points for that quiz. Excused absences as previously defined will be required to be presented to the course instructor (Dr. Arnold) within 2 working days of the quiz. The first two excused absences from lab quizzes will be made up using the last two possible lab quizzes as described above. If more than two excused absences are approved, only then will individualized makeup lab quizzes will be arranged. If more than four 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 for laboratories are based on the plant list from the previous week, however the bonus plants are 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 or other plant identification activity as designated by your laboratory instructor.

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 laboratory classroom in HFSB 110 or the appropriate greenhouse prior to the first laboratory each week. These specimens will be retained in the classroom until after the final lab of the week, longer if 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 or the laboratory plant images 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;**

<table>
<thead>
<tr>
<th>Family</th>
<th>Scientific Name</th>
<th>Common Name</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aceraceae</td>
<td><em>Acer rubrum</em></td>
<td>Red Maple</td>
<td>2</td>
</tr>
</tbody>
</table>

**Subspecies, variety, or forma of a species;**

<table>
<thead>
<tr>
<th>Family</th>
<th>Scientific Name</th>
<th>Common Name</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bignoniaceae</td>
<td><em>Chilopsis linearis subsp. arcuata</em></td>
<td>West Texas Desert Willow</td>
<td>2</td>
</tr>
<tr>
<td>Malvaceae</td>
<td><em>Malvaviscus arboreus var. mexicanus</em></td>
<td>Giant Turk’s Cap</td>
<td>2</td>
</tr>
<tr>
<td>Caprifoliaceae</td>
<td><em>Viburnum plicatum f. tomentosum</em></td>
<td>Doublefile Viburnum</td>
<td>2</td>
</tr>
</tbody>
</table>

**Cultivar of a species;**

<table>
<thead>
<tr>
<th>Family</th>
<th>Scientific Name</th>
<th>Common Name</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bignoniaceae</td>
<td><em>Chilopsis linearis</em> ‘Dark Storm’</td>
<td>Dark Storm Desert Willow</td>
<td>2</td>
</tr>
</tbody>
</table>

**Cultivar of a subspecies, variety or forma;**

<table>
<thead>
<tr>
<th>Family</th>
<th>Scientific Name</th>
<th>Common Name</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fabaceae</td>
<td><em>Gleditsia triacanthos var. inermis</em> ‘Skyline’</td>
<td>Skyline Thornless Common Honeylocust</td>
<td>2</td>
</tr>
</tbody>
</table>

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 “X” on intergeneric hybrids, “x” 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 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 course grade. The lab final will be given during the last regularly scheduled lab periods of the semester. Decisions on the lab final by the laboratory instructors are definitive. **The laboratory final is cumulative containing plants from throughout the semester.**

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

*Final = 300 points. Tuesday April 23 or Wednesday April 24, 2019 during your lab period.*
**Makeup Policy:**

Makeup examinations or quizzes (see quiz section) will be granted only for excused absences. Self explanatory excuses for illness are not accepted. The excused absences must be on the official university excused absence list or a written excuse from a licensed medical doctor is required, not just a note from another instructor. If another instructor wishes to request consideration for excusing students from lecture or laboratory sessions in HORT 306 to attend field trips or other activities for another class, approval must be requested in writing and approved by the HORT 306 instructor in advance of the activity. The activity must be on the official university list or approved by the HORT 306 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. Two opportunities for makeup laboratory quizzes are provided during the laboratories at the end of the semester. Additional opportunities for makeup quizzes will be granted only if more than two excused absences are documented for a given student. Any lecture exam, lecture final or laboratory final that is excused in advance by the instructor for a valid conflict, must be made up prior to the regularly scheduled examination or another time agreeable to the instructor. **Makeups for lecture exams missed due to illness or other unforeseen circumstance deemed acceptable as an excuse by the instructor must be scheduled within two working days of the originally scheduled exam time.** Failure to contact the instructor (Dr. Arnold) within this two working day period, unless students are physically unable to do so, with a valid medical excuse will result in a zero for that examination, exceptions will be granted only if hospitalization or similar dire circumstances are required.

**Required Textbook:**


**Supplementary lecture materials:**

A copy of this syllabus, weekly updated grades, and other supplementary materials can be accessed on the course website accessible at http://aggie-horticulture.tamu.edu/syllabi/308/Home/Frameset.htm these will be the official lists of plants covered during the semester. A copy of the syllabus can also be accessed on the TAMU Howdy website. Official revised plant lists will be posted on the HORT 308 class home page, these will be the official lists of plants covered during the semester. Adobe Acrobat files of the lecture PowerPoint presentations are available on the same website. Laboratory plant images are also available as PowerPoint presentations on this website. Color images and a synopsis of critical plant characteristics are available on the Plant Pictures Pages website (accessed through the class website) for most taxa. These taxa can be accessed via a searchable data base. Check out the class website for other study materials as the semester progresses. All materials in handouts or on the class websites carry the same copyright reservations as materials presented in the text and syllabus.
Laboratories:

Laboratories will be conducted as indoor labs, in greenhouse laboratories or on-campus walking 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 room 110 in the Horticulture / Forestry Sciences Building or other location as announced in advance. 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 or via official TAMU email, if no notification is given the labs will meet in 110 HFSB. **Laboratories will meet during the first week of classes.** All work is expected to be independent.

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 Electronic Devices in Lecture or Laboratory:

**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. Text messaging during lectures, labs or examinations is prohibited. No electronic devices (laptop computers, palm pilots, ipads, translators, calculators, cell phones, etc.) may be used during any lectures sessions, exams, quizzes, or laboratory quizzes unless specifically requested in advance by student services on the student's behalf or approved by the instructor. The single exception, will be that a camera is permitted to photograph the plants during laboratories, however, taping of lectures or labs is not permitted. Photographing of fellow students or the instructors is prohibited without their permission.

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 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://aggiehonor.tamu.edu/.
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 anti-discrimination 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 Disability Services, currently located in the Disability Services building at the Student Services at White Creek complex on west campus or call 979-845-1637. For additional information, visit http://disability.tamu.edu.

If you would like to be considered for disability accommodations, you must first register with disability services and provide medical documentation to support your request for consideration.”

Safety Guidelines:

- Work only as authorized by your instructor. Do not perform unauthorized experiments.
- Maintain a professional demeanor during laboratory and field exercises. Do not run, engage in horse-play, or otherwise act recklessly.
- Purchase and wear safety goggles and other personal protective equipment as directed by your instructor.
- Learn emergency procedures and know the locations of the nearest first aid station, eye wash, fire extinguishers, and/or chemical cleanup materials.
- Carefully read all instructions and thoroughly plan your work.
- Wear appropriate clothing and secure-fitting, hard-soled, closed-toe shoes during all laboratory and field sessions. Confine long hair and remove dangling jewelry. Store personal items in the area designated by your instructor.
- Keep work areas neat, clean, and free of clutter.
- Do not eat, drink, use tobacco products, chew gum, apply cosmetics, or handle contact lenses in the laboratory.
- Do not use cell phones, computers, or other personal electronic devices during laboratory or field sessions unless asked to do so by your instructor.
• Notify your instructor immediately if any type of accident or emergency occurs.
• Notify your instructor immediately and seek appropriate medical treatment if you are injured during a laboratory or field exercise.
• Be watchful during field sessions for hazards such as uneven soil surfaces, roots and other trip hazards, steep terrain and depressions, poison ivy, fire ants, bees, wasps, snakes, etc.
• Stay with the class group at all times unless directed to do otherwise by your instructor.
• Dress appropriately for bright sun or inclement weather conditions. Apply water-resistant sunscreen prior to field exercises.
• Notify your instructor of any known allergies to insect bites or other plants or animals that may be encountered in the field before field exercises.
• Notify your instructor immediately and seek appropriate medical treatment if you are injured during field exercises.

Study Hints For HORT 308:

- Learn to identify approximately 20 or so 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://aggie-horticulture.tamu.edu/syllabi/308/Home/Frameset.htm) along with the course syllabus; other plant materials information is also available on the Plant Picture Pages and in the lab images posted to the class website as PowerPoint slides.
- Go back and review what the twigs of deciduous plants look like after they lose 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, design, 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 plant” 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 design use or site 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 laboratory is typically 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 after the last lab 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.

- Laminate your notes to avoid ink run from rain, spills, and tears, lol 😊.

**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.
- Occasional guest lectures or seminars held outside class times may be attended for extra credit as announced in class or emails.
- Participation in some preannounced service learning projects may be eligible for extra credit as announced in class or emails.
- 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.

**Individualized Extra Credit Work:**

- *Individualized extra credit work will not be assigned, put your efforts into the assigned work or class bonus credit as outlined above.*
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 2019
(This is 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 2019 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: ________________________________________________________________