NOTE to prospective students: This syllabus is intended to provide students who are considering taking this course an idea of what they will be learning. A more detailed syllabus will be available on the course Blackboard site for enrolled students and may be more current than this sample syllabus.

Course Name: Arboriculture
Course Number: FES-HORT 447/547
Term Offered: Usually Spring Credits: 4
Instructor name: Paul D. Ries, Instructor and Extension Specialist, OSU Dept. of Forest Ecosystems and Society
Instructor email: paul.ries@oregonstate.edu Instructor phone: 541-737-3197

Catalog Description – The principles and practices of arboriculture, the art and science of selecting, planting, establishing and maintaining trees in urban, suburban, commercial, and residential landscapes. CROSSLISTED as HORT 447. PREREQs: (FES 141 or FES 241 or HORT 226 or HORT 228) and (FOR 111 or HORT 112)

Course Overview - Arboriculture is the art, science, and practice of selecting, establishing, and maintaining landscape trees. The purpose of this course is to familiarize students with the principles and practices of arboriculture. Upon successful completion of this course, students will possess knowledge and skills of arboricultural principles including tree problem diagnosis, tree risk assessment, and urban tree management. Students will learn proper arboriculture practices including tree selection, planting, and care, and be able to demonstrate a professional approach to managing trees in an urban landscape. While this course covers a technical body of knowledge, it is taught at a managerial level.

Course Credits and Student Time Commitment - This course combines approximately 120 hours of instruction, online activities, and assignments for 4 credits.

Measurable Student Learning Outcomes - Upon completion of this course, students will be able to:
   • Describe the appropriate technical and managerial aspects of helping trees stay healthy, safe, and attractive,
   • Explain how trees grow, sustain themselves, and eventually die,
   • Apply the principles and practice of proper tree care, diagnostics, and risk assessment
   • Articulate the practical, legal, ethical, and business issues associated with urban trees and their management and care,
   • Demonstrate knowledge of the proper use of arboricultural equipment including appropriate safety practices,
   • Exhibit professional skills and standards of excellence that will be invaluable in a professional career practicing arboriculture, or working with arborists.

In addition the above items, Graduate Student level learning outcomes also include to:
   • Critically analyze contemporary arboriculture issues, and identify recommended tools and strategies to address the situations,
   • Articulate and evaluate current arboricultural standards, advanced practices, and management controversies,
   • Synthesize and extrapolate this material to individual areas of interest, expertise, and graduate study.
Technical Assistance
If you experience computer difficulties, need help downloading a browser or plug-in, assistance logging into the course, or if you experience any errors or problems while in your online course, contact the OSU Help Desk for assistance. You can call (541) 737-3474, email osuhelpdesk@oregonstate.edu or visit the OSU Computer Helpdesk.

Canvas
This course is delivered via the Canvas online learning community, where you will interact with your classmates and with me. Within the course Blackboard site you will access the learning materials, tutorials, and syllabus; discuss issues; submit assignments; take exams; email other students and the instructor; and participate in online activities including videos and lectures by the instructor and other urban forestry professionals. To preview how an online course works, visit the Ecampus Course Demo. For technical assistance, please visit Ecampus Technical Help.

Learning Resources:

- **Required Readings**: As assigned and provided or linked by instructor. Graduate students will have a few more additional readings.

*NOTE: For textbook accuracy, please always check the textbook list at the OSU Bookstore website ([http://osubeaverstore.com/Academics/](http://osubeaverstore.com/Academics/)). Sample syllabi may not have the most up-to-date information.*

Evaluation of Student Performance

Grading Requirements
There are three elements upon which your course grade will be based. Your completion of these requirements will enable you to accumulate points that will determine your final grade in the course. There are 1000 available points. Visit the START HERE folder in Canvas for detailed explanations of each of these assignments. The grading elements and their corresponding point values are:

**Discussion Board Participation** 150 points or 15%
- Undergraduate Students - Each week’s content will include one or more discussion pages to further online learning from lectures or readings from the week. Everyone brings something to offer to the class, whether it is personal experience, insight into the readings, or a unique perspective. You will post in each of ten weeks.
- Graduate students – Graduate students grades will be based on participation in 9 of the weeks, and leading the discussion for the undergraduate students during one of the weeks as assigned.

**Written Professional Reports** 350 points or 35%
- Undergraduate students will prepare three professional reports discussing the arboricultural principles presented in class. These will include:
  - Site Analysis Report (100 points) – Using information from weeks 1, 2 and 3, prepare a report on a specific landscape site.
• Diagnostic Report (100 points) – Using the information from weeks 4, 5, 6 and 7, prepare a report on a specific arboriculture issue, disease, or pest.
• Field Experience Report (150 points) - You will spend at least 4 hours in the field with an ISA Certified Arborist, and write a report about your experience.

Graduate Students will complete the Site Analysis and Field Experience Reports from this list, and will also include a management prescription with each report. For the Diagnostic Report, students will prepare a Case Study of an arboricultural issue and present it to the rest of the class in the Discussion Board during weeks 9 or 10. This case study will include the identification of a specific problem or issue, a rigorous literature review, a list of management options, and the identification of best management practices to address the problem.

Quizzes and Exams 500 points or 50%

Three quizzes (10% each) and one final exam (20%) will make up this grading component. Quizzes and exam will include a variety of question formats. The final will be cumulative. Graduate Students will have a separate exam. Quizzes and Exams will not be proctored.

Grading Distribution:
The following grade distribution will be used for this course:

A (940 - 1000), A- (900-939), B+ (870 - 899), B (830 - 869), B- (800 - 829), C+ (770 - 799),
C (730 - 769), C- (700 - 729), D+ (670 - 699), D (630 - 669), D- (600 – 629), F (599 and lower)

Course Content
This course is arranged on a weekly basis, with 5 or 6 assignments covering the topic of the week. Each week’s content will include two lectures, a lab or demonstration assignment, one or more videos or podcasts, a reading assignment, and a discussion board. For those of you that desire to work ahead, at any given time during the quarter you will be able to access the assignments in Canvas for most of the weeks. This will not apply to exams, which will only be open during a specified time window. You are strongly encouraged to log on to the course site on Monday and get working on that week’s content. All times referred to in this course are Pacific Standard Time or Pacific Daylight Time. The weekly assignment topics are as follows:

Typical Course Schedule of Topics and Assignments

<table>
<thead>
<tr>
<th>W k</th>
<th>Topic/lectures/discussion</th>
<th>lab/demonstration/video</th>
<th>Reading Assignments</th>
<th>Grading Elements Due</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>History and Practice of Arboriculture; Tree Biology and Physiology</td>
<td>Lab 1: Arboriculture Practices, Tree Biology</td>
<td>Lilly Ch. 1 or Harris Ch. 1,2</td>
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<tr>
<td>2</td>
<td>The Landscape Below Ground - roots, soils, nutrients, water</td>
<td>Lab 2: The Landscape Below Ground</td>
<td>Lilly Ch. 3, 4, 5 or Harris Ch. 4, 7, 12, 13</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Tree Site &amp; Species Selection &amp; Evaluation, Tree Planting, Early Tree Care</td>
<td>Lab 3: Tree Planting Species and Site Evaluation, Tree Planting, Aftercare</td>
<td>Lilly Ch. 6, 7 or Harris Ch. 3, 6, 8, 9</td>
<td>Quiz 1</td>
</tr>
<tr>
<td>4</td>
<td>Tree Health: Diagnostic Methods, Biotic &amp; Abiotic Disorders, Plant Health Care</td>
<td>Lab 4: Plant Problem Diagnostics and Plant Health Care</td>
<td>Lilly Ch. 10, 11 or Harris Ch. 18, 19</td>
<td>Report 1 Due</td>
</tr>
<tr>
<td>5</td>
<td>Principles of Tree Pruning, Tree Pruning Practices and Standards</td>
<td>Lab 5: Tree Pruning; Young Tree Structural Pruning</td>
<td>Lilly Ch. 8 Harris Ch. 14, 17</td>
<td></td>
</tr>
</tbody>
</table>

This course is offered through Oregon State University Extended Campus. For more information, contact:
Web: ecampus.oregonstate.edu Email: ecampus@oregonstate.edu Tel: 800-667-1465
<table>
<thead>
<tr>
<th>Lab</th>
<th>Title</th>
<th>Reading/Supplemental</th>
<th>Quiz/Due</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>Protecting Trees During Construction and in Native Forest Remnants</td>
<td>Lab 6: Protecting Trees During Construction</td>
<td>Lilly Ch. 13 or Harris Ch. 11</td>
</tr>
<tr>
<td>7</td>
<td>Tree Biomechanics and Hazards</td>
<td>Lab 7: Tree Biomechanics</td>
<td>Supplemental</td>
</tr>
<tr>
<td>8</td>
<td>Tree Risk Assessment and Tree Failure Analysis</td>
<td>Lab 8: Tree Risk Assessment</td>
<td>Lilly Ch. 12 or Harris Ch. 16</td>
</tr>
<tr>
<td>9</td>
<td>Practical Arboriculture: Tree Climbing, Safe Work Practices, Utility Arboriculture</td>
<td>Lab 9: Utility Arboriculture</td>
<td>Lilly Ch. 15, 16 or Supplemental</td>
</tr>
<tr>
<td>10</td>
<td>Tree Management Situations and issues</td>
<td>Lab 10: Managing Tree Conflicts</td>
<td>Supplemental or Harris Ch. 5, 10</td>
</tr>
</tbody>
</table>

**Late Work**

You’ll find I can be lenient when necessary, but if you abuse that trust, your grade will suffer. Since this is a graduate level course, there’s a certain level of personal responsibility and professional behavior that I expect from my students. Late work will be accepted at my discretion **when you have notified me prior to the assignment due date**. If you do not notify me ahead of time, assignments will not be accepted after the due date without penalty, and may not be accepted at all (unless you are experiencing an unexpected crisis that warrants an exception, such as a hospital stay or death in the family). Any unexcused late assignment, if accepted, is subject to **a letter grade per day deduction** at the instructor’s discretion. This policy is strictly enforced in order to be fair to students who have turned in their assignments in time.

**Makeup Exams**

Makeup exams will be given only for missed exams excused in advance by the instructor. Excused absences will not be given for airline reservations, routine illness (colds, flu, stomach aches), or other common ailments. Excused absences will generally not be given after the absence has occurred, except under very unusual circumstances.

**Guidelines for a Productive and Effective Online Classroom**

Students are expected to conduct themselves in the course (e.g., on discussion boards, email) in compliance with the university’s regulations regarding civility.

Civility is an essential ingredient for academic discourse. All communications for this course should be conducted constructively, civilly, and respectfully. Differences in beliefs, opinions, and approaches are to be expected. In all you say and do for this course, be professional. Please bring any communications you believe to be in violation of this class policy to the attention of your instructor.

Active interaction with peers and your instructor is essential to success in this online course, paying particular attention to the following:

- Unless indicated otherwise, please complete the readings and view other instructional materials for each week before participating in the discussion board.
- Read your posts carefully before submitting them.
- Be respectful of others and their opinions, valuing diversity in backgrounds, abilities, and experiences.
- Challenging the ideas held by others is an integral aspect of critical thinking and the academic process. Please word your responses carefully, and recognize that others are expected to challenge your ideas. A positive atmosphere of healthy debate is encouraged.

**Statement Regarding Students with Disabilities**

This course is offered through Oregon State University Extended Campus. For more information, contact:
Web: ecampus.oregonstate.edu   Email: ecampus@oregonstate.edu   Tel: 800-667-1465
Accommodations are collaborative efforts between students, faculty, and Disability Access Services (DAS). Students with accommodations approved through DAS are responsible for contacting the faculty member in charge of the course prior to or during the first week of the term to discuss accommodations. Students who believe they are eligible for accommodations but who have not yet obtained approval through DAS should contact DAS immediately at 541-737-4098.

Expectations for Student Conduct
Student conduct is governed by the university’s policies, as explained in the Office of Student Conduct and Community Standards.

Academic Integrity
Students are expected to comply with all regulations pertaining to academic honesty. For further information, visit Avoiding Academic Dishonesty, or contact the office of Student Conduct and Mediation at 541-737-3656.

OAR 576-015-0020 (2) Academic or Scholarly Dishonesty:

a) Academic or Scholarly Dishonesty is defined as an act of deception in which a Student seeks to claim credit for the work or effort of another person, or uses unauthorized materials or fabricated information in any academic work or research, either through the Student's own efforts or the efforts of another.

b) It includes:

I. CHEATING - use or attempted use of unauthorized materials, information or study aids, or an act of deceit by which a Student attempts to misrepresent mastery of academic effort or information. This includes but is not limited to unauthorized copying or collaboration on a test or assignment, using prohibited materials and texts, any misuse of an electronic device, or using any deceptive means to gain academic credit.

II. FABRICATION - falsification or invention of any information including but not limited to falsifying research, inventing or exaggerating data, or listing incorrect or fictitious references.

III. ASSISTING - helping another commit an act of academic dishonesty. This includes but is not limited to paying or bribing someone to acquire a test or assignment, changing someone's grades or academic records, taking a test/doing an assignment for someone else by any means, including misuse of an electronic device. It is a violation of Oregon state law to create and offer to sell part or all of an educational assignment to another person (ORS 165.114).

IV. TAMPERING - altering or interfering with evaluation instruments or documents.

V. PLAGIARISM - representing the words or ideas of another person or presenting someone else's words, ideas, artistry or data as one's own, or using one's own previously submitted work. Plagiarism includes but is not limited to copying another person's work (including unpublished material) without appropriate referencing, presenting someone else's opinions and theories as one's own, or working jointly on a project and then submitting it as one's own.

c) Academic Dishonesty cases are handled initially by the academic units, following the process outlined in the University's Academic Dishonesty Report Form, and will also be referred to SCCS for action under these rules.

You must write your own papers/exams in your own words. “Cutting and pasting” blocks of text from other sources is considered plagiarism. Of course, you may quote from source material, but the quote must be brief (usually less than a paragraph), enclosed within quotation marks, and correctly cited in the text and in the reference section. Please ask in advance if you are uncertain regarding the appropriate use of material from other sources. Bottom line – act like a professional.
Conduct in this Online Classroom
Students are expected to conduct themselves in the course (e.g., on discussion boards, email postings) in compliance with the university's regulations regarding civility.

Tutoring
NetTutor is a leading provider of online tutoring and learner support services fully staffed by experienced, trained and monitored tutors. Students connect to live tutors from any computer that has Internet access. NetTutor provides a virtual whiteboard that allows tutors and students to work on problems in a real time environment. They also have an online writing lab where tutors critique and return essays within 24 to 48 hours. Access NetTutor from within your class by clicking on the NetTutor button in your course menu.

OSU Student Evaluation of Teaching
Course evaluation results are extremely important and are used to help me improve this course and the learning experience of future students. Results from the 19 multiple choice questions are tabulated anonymously and go directly to instructors and department heads. Student comments on the open-ended questions are compiled and confidentially forwarded to each instructor, per OSU procedures. The online Student Evaluation of Teaching form will be available toward the end of each term, and you will be sent instructions via ONID by the Office of Academic Programs, Assessment, and Accreditation. You will log in to “Student Online Services” to respond to the online questionnaire. The results on the form are anonymous and are not tabulated until after grades are posted.