

SYLLABUS
PLSC 452 (3CR) SPRING 2013
ENVIRONMENTAL HORTICULTURE

Lecture: MW 12:00-12:50 p.m. PLSC 1113

Lab: W 1:00-3:50 p.m. PLSC 1113

Prerequisites: PLSC 253, PLSC 254

Professor: Steven M. Cohan, Ph.D.
2124 Plant Sciences Bldg
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Course Description: Horticulture principles for the establishment and maintenance of plant materials within residential and commercial landscapes will be addressed. The effect of soil conditions, environmental factors, and commercial practices will be discussed in relation to the growth and development of newly installed plant materials. Environmental sustainability will be interfaced with Best Management Practices addressing, storm water management, nutrient management, integrated pest management and irrigation management. Field diagnostics will be addressed as an analytical tools to assess plant decline and determine corrective mangment practices.

Lectures, reference materials and laboratory field trips will collectively provide a comprehensive understanding of commercial and residential sustainable landscape practices. Networking with industry representatives will provide additional educational resources, providing insight into build/design projects from the perspectives of design, estimating, installation and management.

Reference materials: Textbook – Establishment and Maintenance of Landscape Plants II
Carle E. Whitcomb, Ph.D. ISBN: 0-9613109-7-9

Web site articles,

Webcast Urban Sustainability Lecture Series PLSC 425

www.psla.umd.edu

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| Grading: | Homework assignments | 200 pts. |
| | Quizzes | 100 pts |
| | Midterm exam | 100 pts. |
| | Final exam | 100 pts. |
| | Term project | 150 pts. |

Term Project: The primary objective of this exercise is to provide students with the opportunity to apply their class knowledge to a landscape design/management project. Working within a group students will be responsible for specific phases of the project i.e. site analysis, site preparation, design presentation, estimating, material acquisition, production scheduling and job cost management. The integration of environmental sustainable practices is an essential

component of the projects, Manifestation of environmental stewardship will include Best Management Practices and sustainable landscape design concepts. The student's grade will be based upon their contribution and the overall quality of their respective phase of the project.

Learning Outcomes

- Students will develop technical and knowledge-based skills in the required areas of study.
- Students will use technical and basic learned knowledge to collaborate, solve problems and then articulate conclusions.
- Students shall develop effective communication skills and demonstrate the ability to present ideas with clarity to an appropriate audience.

Academic Conduct:

- **Attendance:** According to university policies, class attendance is not mandatory. However, regular attendance at lectures and labs is strongly recommended to enhance academic performance.
- **Makeup Exams:** Makeup exams will be only given under special circumstances with justification provided prior to the exam.
- **Academic Integrity:** Academic dishonesty manifested by cheating, plagiarism, and fabrication will not be tolerated. The Code of Academic Integrity at the University of Maryland defines the following as violations of the student Honor Code:
 - a. *Academic Dishonesty:* Intentionally or knowingly helping or attempting to help another violate a provision of the Code.
 - b. *Cheating:* Intentionally using or attempting to use unauthorized materials, information, or study aids in any academic exercise.
 - c. *Plagiarism:* Intentionally or knowingly representing the words or ideas of another as one's own in any academic exercise.
 - d. *Fabrication:* Intentional and unauthorized falsification or invention of any information or citation in an academic exercise.

Disability Support Services: The University of Maryland is committed to making reasonable accommodations to individuals with disabilities that have been documented by Disability Support Services (0126 Shoemaker Hall). Any student seeking accommodations must register with Disability Support Services. If you wish to discuss academic accommodations for this class, please contact the professor as soon as possible.

Procedures for Inclement Weather: Official closures and delays are announced on the campus website (<http://www.umd.edu/>) and snow phone line (301.405.SNOW) as well as local radio and TV stations.

Course Evaluations:

Your participation in the evaluation of courses through CourseEvalUM (www.courseevaluum.umd.edu) is a responsibility you hold as a student member of our academic community. Your feedback is confidential and important to the improvement of teaching and learning at the University as well as to the tenure and promotion process. By completing all of your evaluations each semester you will have the privilege of accessing the summary report for thousands of courses online at Testudo.

PLSC 452 SPRING 2012

COURSE OUTLINE

| Date | Lecture | Assignments | Lab |
|-------------|---------------------------|---|-------------------|
| January 23 | Environmental Stewardship | | |
| January 28 | Soil structure | Chapter 6 | Campus survey |
| January 30 | Soil compaction | Chapter 9 | |
| February 4 | Planting practices | Chapters 7,8 | Field application |
| February 6 | Planting Practices | Chapterts.11,12,13 | |
| February 11 | Plant selection | | Field Trip |
| February 13 | Fertilizers | Chapters.16,17 Env. Career Fair (2/21) | |
| February 18 | Fertilizers | | Nutrient Mgmt. |
| February 25 | Pruning Principles | Chapter 23 | |
| February 27 | Pruning principles | | Field application |
| March 4 | Weed Management | Chapter 19 | |
| March 6 | Midterm exam | | |
| March 11 | Tree Protection | Chapters 20,21 | |
| March 13 | Spring Break | | |
| March 25 | Spring Break | | |
| March 27 | Urban Tree Management | | |

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| April 1 | Integrated Pest Management | |
| April 3 | Landscape Diagnostics | Campus tour |
| April 8 | Applications of Biomicry | |
| April 10 | Irrigation Management | Field demo |
| April 15 | Storm Water Management Environmental Quality Resources | |
| April 17 | Design/Build Contracting | Field Trip |
| April 22 | Sustainable Landscape Management | Field Trip |
| April 24 | Turf Management | Field Trip |
| April 29 | Biofiltration Systems | |
| May 1 | Green Roofs | Cambridge Hall |
| May 6 | Project Presentations | |
| May 17 | Final Exam 8:00 am | |

