

PLS 220 - INTRODUCTION TO PLANT IDENTIFICATION-FALL 2008

Instructor: Dr. Richard Durham

Office: N3 10G Agricultural Science North; Phone: 257-3249; email: rdurham@uky.edu

Office Hours: open, stop by or make an appointment, usually available after each laboratory session

Lab Assistant: Shari Dutton

Office: Greenhouse; Phone: 257-4209 (greenhouse); email: sdutton@uky.edu

Office Hours: Available by appointment

Web site for PLS 220: www.uky.edu/ag/horticulture/classinfo.html.

Course Schedule

All sections meet for lecture on Tuesdays and Thursdays at 8:30 am in A7 Agriculture Science North

Each section meets for laboratory on Tuesdays at the following times:

Section 1: 10:00 to 11:50 am

Section 2: 1:00 to 2:50 pm

Labs will meet in the Greenhouse Classroom (GH 12).

Justification

The names of plants are the basis of communication between all people involved in the production, service and design sectors of plant science. This course will use the characteristics of ~140 diverse and common plants as the introduction to the language of plant names, common differences in plant form and the niche of these plants in nature and in the human landscape.

Objectives

The overall purpose of this course is for students to learn the major visual differences between common plants, appreciate how plants are related to one another in families, understand the ecological strategies these differences represent and use plant names as a communication of these differences.

Specific Objectives:

- To give students the opportunity to walk among, touch, closely observe and obtain knowledge about plants common in everyday life
- To increase the awareness of differences in the features of plants and the ecological significance for these differences

Grading

The completion of these objectives will be evaluated by:

Lecture - total of 125 points

- Short in-class writing assignments during the lecture portion of the course will be performed: five or more assignments at 5 points each for a total of 25 points
- Two lecture exams worth 50 points each

Plant ID and morphology - total of 375 points

- Unannounced quizzes will be given in laboratory that cover morphology topics, plant identification, or a combination thereof, that have been recently introduced. Up to ten unannounced or pre-announced quizzes at 5-10 points each will be given, these will contribute a total of 75 points.
- Practicum exams will include identification of plant parts (morphology) as well as identification of plant species introduced in previous labs: three exams, 100 points each, for a total of 300 points. These exams will primarily cover material introduced since the previous exam; however, there may also be material that was covered on previous exams. Spelling is important with regard to scientific names, to ensure full credit for answers, make sure names and terms are spelled correctly.

Grading (continued)

Final letter grades will be determined based on the percentage of total points earned on the exams and quizzes described above. A = 90-100%, B = 80-89.5%, C = 70-79.5%, D = 60-69.5, E = < 59.5%..

In order to learn and retain information presented in this course, you must attend class on a regular basis. **Attendance is required in this course and will be evaluated using the unannounced lab quizzes and short writing assignments given in lecture.** A score of 0 will be assigned for any missed exams or quizzes. Make-up exams, due to an excused absence, will be given only at specific times and only once for each test. There will be no make-ups given for unannounced quizzes or in-class writing assignments; however, if you have an excused absence, the missed quiz or assignment will not count against you. Please notify the instructor of excused absences in advance, if possible, and within one class day of unforeseen missed exams or quizzes.

Required Texts

How to Identify Plant. 1985. H.D. Harrington.

Other Resources (Available in Agriculture Information Center, First Floor, Ag. Science – North, or Greenhouse Classroom)

Manual of Woody Landscape Plants. 1998. M. Dirr.

Manual of Herbaceous Ornamental Plants. 1994. S. Still

The Random House Book of Shrubs. 1998. R. Phillips and M. Rix

Rodale's Successful Organic Gardening--Lawns, Grasses and Groundcovers. 1995. L.& N. Hill.

The Random House Book of Trees of North America and Europe. 1978. R. Phillips.

AGR-12, Weeds of Kentucky Turf. UK Cooperative Extension Service.

AGR-117, Winter Annual Weeds of Kentucky. UK Cooperative Extension Service.

AGR-118, Summer Annual Broadleaf Weeds of Kentucky. UK Cooperative Extension Service.

Course Outline

The course is divided into three sections: lecture – general topics, lecture - morphology topics, and plant identification labs. This is a tentative schedule, specific dates for exams and topics are subject to change with advanced notification.

Lecture topics

Topics in bold deal with plant morphology, these concepts will be introduced in lecture and reinforced in lab. You will be tested over morphology topics during the practicum exams, not the lecture exams.

August 28	Class orientation
September 2	Plant growth forms and life cycles
September 4	Overview of the Plant Kingdom
September 9	Leaves
September 11	Plant taxonomy and nomenclature
September 16	Leaves
September 18	Plant taxonomy and nomenclature
September 23	Leaves
September 25	Plant families, an introduction
September 30	Environmental factors affecting plant growth and diversity
October 2	Optional review in GH classroom, Practicum Exam 1 , 4:00 Seay Auditorium
October 7	Flowers
October 9	Plant adaptations for specific environments
October 14	Flowers
October 16	Plant adaptations for specific environments
October 21	Stems and roots
October 23	Lecture Exam I (no morphology)

October 28	Landscape ecology: Plant communities
October 30	Landscape ecology: Weeds and why they are so successful
November 4	No class – Election Day
November 6	Optional review in GH classroom, Practicum Exam 2 , 4:00 Seay Auditorium
November 11	Fleshy Fruit
November 13	Landscape management: Sustainable landscapes
November 18	Dry Fruits
November 20	Landscape management: Woody plants
November 25	Landscape management: Herbaceous annual and perennial plants
November 27	No class - Thanksgiving
December 2	Plant keys
December 4	Plants and People: Significance of Human/plant interactions
December 9	Plants and People: Significance of Human/plant interactions, course evaluation
December 11	Optional review in GH classroom, Practicum Exam 3 , 4:00 Seay Auditorium
December 15	8:00 am (Monday - final exam schedule) Lecture Exam II

Plant Identification Lab Topics (Tuesdays @ Greenhouse, most will be outside)

September 2	Annual flowers
September 9	Perennial flowers
September 16	Aquatic and insectivorous plants
September 23	Weeds and turfgrasses
September 30	Make-up lab and review
October 7	Food Plants
October 14	Woody plants
October 21	Woody plants
October 28	Cool season annuals and ground covers
November 4	No class – Election Day
November 11	Evergreen trees and shrubs
November 18	Foliage plants
November 25	Open – Arboretum visit writing assignment due
December 2	Cut flowers and potted plants
December 9	Make-up lab and review

A note about inclement weather and labs:

Dress appropriately! Be prepared for the weather-of-the-day on Tuesdays for plant labs. Wear comfortable shoes as we will do some walking. In the event of severe weather, Tuesday and Thursday labs may be switched, combined, or cancelled. A recorded message will be available at 257-3249 on the day of the lab. If no message regarding lab cancellation is heard, assume labs are meeting as scheduled.

A note about plant materials and items for review:

Most of the outdoor plants that we cover in class are available on campus and may also be found at the UK Arboretum on Alumni Drive. You are encouraged to visit the Arboretum to review plants covered in lab and to see the plants growing in a different context. Do not remove or collect plant material for review from the Arboretum. We will make every effort to have plant samples available for review at the greenhouse. Photos can also be taken.

Classroom decorum:

Please refrain from distracting behavior during class sessions (including labs). This includes cell phone use, smoking, and excessive talking on topics not related to the subject at hand.