LANDSCAPE ARCHITECTURE 420/520: PLANT MATERIALS
Fall Semester 2017
9:30-12:00 p.m. Tuesday and Thursday
Landscape Architecture and Planning lecture room (Triangle North) and field studies

Instructor: Margaret Livingston, mlivings@u.arizona.edu
621-5359, A303L Landscape Architecture

PURPOSE: To develop an understanding of the native and exotic (non-native) plant species used in urban and rural landscape designs, and revegetation and restoration projects in the southwestern U.S.

DESCRIPTION: This course focuses on the examination and evaluation of plants effectively used in landscapes of the Southwest. Emphasis is placed on strategies useful for plant identification and appropriate plant selection for a variety of landscape uses. Field studies will be the primary mode of instruction whereas classroom lectures provide support material for the field work.

COURSE OBJECTIVES: Upon completion of the course students should:

1. be able to identify species commonly used in created landscapes of the Southwest;
2. know cultural requirements, region of origin, recommended landscape uses, and other important features of species included in the course;
3. understand general characteristics of native plant communities of this region;
4. be able to select appropriate plants for various design situations.

COURSE REFERENCES (recommended texts*):
A Field Guide to the Plants of Arizona, Epple
Arizona Flora, Kearney and Peebles (more technical reference)
Biotic Communities: Southwestern United States and southwestern Mexico, Brown (more technical reference)
Cool plant for Hot Gardens: 200 Water-smart choices for the Southwest, Starr
Desert landscaping, Brookbank
Grasses of Southwestern United States, Gould (more technical reference)
Landscape Plants for Dry Regions, Jones and Sacamano
Landscape plants for Western Regions: an Illustrated Guide to Plants for Water Conservation, Perry
Low Water Use Plants for California and the Southwest, Shuler*
Native Plants for Southwestern Landscapes, Mielke*
Plants for Dry Climates, Duffield and Jones*
The Arizona Low Desert Flower Garden, Mathura
Sunset Western Garden Book, Lane
Weeds of the West, Whitson (more technical reference)
EVALUATION:
All grading is done separately for undergraduate and graduate students. Assignment of final grade is not based on any preconceived thresholds for letter grades, but roughly follows: \( \geq 90\% = A; \ 80-89\% = B; \ 70-79\% = C; \ 60-69\% = D; \ <60\% = E. \)

Lecture (10%) and field (11@ 5% each) quizzes 60%

Final field quiz (Tuesday, December 5)
9:30 a.m. – 12:00 p.m. 20%

Projects (2) 20%

The lecture quiz focuses on material discussed in lecture and family characteristics discussed during field studies.

Weekly (starting the 3rd week of the semester) field quizzes require identification, including Latin (botanical) and common names, of 15 plants presented by the instructor.

The field identification quiz is comprehensive, typically including plants presented prior to the week of the exam. Lowest field quiz score for the semester is dropped.

The final field quiz is a comprehensive field identification of plants (typically 100 species) presented in class.

Project one focuses on plant identification and project two focuses on application of plants in a design.

LECTURE OUTLINE:
Lecture is typically Tuesday, 9:30-10:00 a.m. Lectures are presented in the east wing of the CAPLA building, third floor, Triangle North lecture room.

Identifying plants
- Organization of the plant kingdom
- Classification of vascular plants and their characteristics
- Dichotomous key

Climate and ecosystems of the Southwest
- Climate: definition and variables
- Effects of macro-, meso-, and microclimates on plant communities
- Deserts of the Southwest
- Biotic communities of Arizona

Plant selection and maintenance
- Selecting appropriate plants for a site
- Maintaining healthy plants: irrigation, soil treatments, planting techniques.
FIELD STUDIES OUTLINE:
Field studies are typically Tuesday, 10:00 a.m.-12:00 p.m., and Thursday, 9:30 a.m.-12:00 p.m. We meet at the west end of the 3rd floor studio space of the CAPLA east building. Field studies focus on native and non-native plants used in the Southwest.

FIELD TRIPS: Field trips are scheduled during class time. If a student cannot attend, an assignment will be given to replace participation in the field trip.

Absences and classroom conduct:
You are expected to attend all lecture and laboratory sessions. If an absence is anticipated, please inform me of the time and reason for the absence in advance. While in class you are expected to conduct yourself in a manner conducive to learning and in a way that does not interfere with other students' concentration.

Special needs and accommodations:
If you need special accommodations or services contact the Learning Disabilities Program/SALT (621-1242) or the Center for Disability Related Resources (621-3268). We will do everything we can to accommodate your needs in order to enhance your learning experience, but we must know beforehand.

Academic integrity:
You are encouraged to share intellectual views and discuss freely the principles and applications of the course materials. However, graded classroom, laboratory and homework exercises must be executed independently, except as noted by the instructor. This course operates under the Academic Code as described at http://catalog.arizona.edu/policies/974/acacode.htm

Incomplete Policy:
Any incomplete grade given must be verified with a written agreement with the student that specifies the work to be done and a timetable for completion.

Teachers open the door, but you must enter by yourself

Chinese Proverb