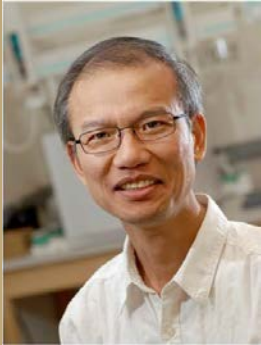


Course Focus
BIOO 433—Plant Physiology - Chaofu Lu



This class is offered every spring semester. And is designed for upper level undergraduates (junior and senior) and graduate students, who have a basic knowledge of chemistry/biochemistry and botany. Most of the students who take the class come from plant science related majors such as horticulture, plant biology, and crop science although many are from range science, wildlife management and others.

The scope of plant physiology as a science is very broad, ranging from biophysics and molecular genetics to plant development and environmental physiology.

Photosynthetic metabolism not only provides carbon and energy for the growing plant, but also determines the capacity of the plant to withstand environmental stress. The growth of roots, stems, leaves, flowers and seeds are regulated by a host of interacting factors such as hormones, light, temperature, nutrition and carbon metabolism. Plant physiology is a very active field of study and new revelations about how plants work are being published almost daily in predominant scientific journals such as Annual Review of Plant Biology, Plant Cell, The Plant Journal, and Plant Physiology among others.

In this class, we'll approach this subject from the perspective of the life of a typical angiosperm - from seed germination and plant development to how plants do things in their everyday life to flowering and plant death. Along the way, we will address topics of current relevance, such as the effects of increasing atmospheric CO₂ on plants, the use of plant materials for biofuels and renewable chemical feedstocks. The ultimate goal of this class is to uncover the inner workings of plants which we all depend on for our existence.