



## ***Course Proposal***

### ***Crop Physiology: from Theory to Practice***

**School of Agriculture - University of Buenos Aires**

#### **Director**

María E. Otegui (PhD, Agr.Eng)

#### **Academic Staff**

Gabriela Abeledo (Dr, Agr.Eng.)

José Andrade (Agr.Eng.)

Guillermo García (MSc, Agr.Eng.)

Magalí Nico (Agr.Eng.)

Román Serrago (PhD, Agr.Eng)



### Objectives

To improve the understanding of processes involved in resource capture and use by crops, as well as the determination of grain yield and grain quality.

### Duration

45 hours, in 4 weeks.

### Contents

The course covers the basic aspects of crop physiology, and it is supported on a theoretical and practical approach. It includes the analysis of environmental variation in resource availability for plant growth, the capacity for resource acquisition by plants, resource use efficiency for biomass production and biomass partitioning among organs. The impact of environmental conditions and management on crop productivity is analyzed within an explanatory and integrative framework, encouraging students to scale up from basic plant physiology to community concepts. Each main topic is accompanied by a set of problems to be solved and exposed by students. Emphasis is given to quantitative methods, including analyses of data collected by participants in demonstration plots as well as of outputs obtained from currently used crop simulation models based on actual farming systems of Argentina and elsewhere.

### Requisites

Background in Plant Physiology, Soil Science and Climatology.