

Hydro-meteorology and Climate Change

Upon successful completion of the course, the student will be able to:

• has understood the phenomena that occur in the lower atmospheric layer, the mechanisms that govern them and their importance in the growth and development of crops

• has understood the special flow conditions near the soil surface and the phenomena of momentum, heat, water vapor and mass transfer over bare and

plant-covered ground necessary for the knowledge of the functioning of the atmospheric conditions and the creation of micrometeorological and microclimatic conditions on from and within the crop

• has understood the importance of precipitation, its distribution in space and time, its characteristics and its effect on the climate and changes in it.

• has understood energy and water balances at field and catchment scale so that he can make appropriate use of this knowledge

be able to propose effective measures to protect crops from adverse weather conditions with an emphasis on techniques for modifying the microclimatic conditions of various crops
understand what climate change is, how it occurs and what impact it has on land, crops and sustainable development

• understand the theory and mechanisms that take place in ecosystems and are related to climate change.