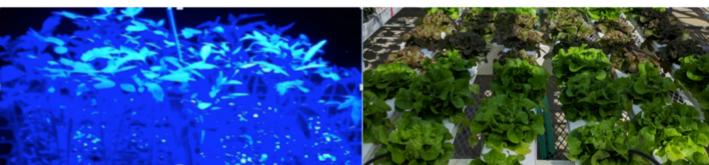
Plant Physiology and Production under Indoor Environments (Greenhouses, Vertical farms)

Listed as: HS 495-590 Sustainable and Organic Horticultural Production



Class: The science of environmental plant physiology and controlled environment technology Laboratory: Apply the concepts to indoor production systems (Greenhouse and Vertical farm)



Concepts in Lecture

Light intensity, Light quality (Sun, LEDs), Photoperiod (light dark periods), CO_2 concentration, Air movement, Temperature, Water vapor, Root zone- nutrient, Irrigation, Substrates, Leaf and canopy energy balance, Plant water relations, Growth analysis

Laboratory

Greenhouse production, Vertical farm production, Light plan design, Energy consumption, Nutrient recipes, Sensors and controller, Cooling and heating, Psychometrics, Field trips

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