



Course Weekly Outline

Week No.	Theoretical	Experimental
1	Irrigation, irrigation benefits and irrigation networks	Introduction to the Irrigation Engineering
2	Types of irrigation methods, evaluation of irrigation water sources	Introduction to the Irrigation Engineering
3	volume of water in the soil and methods for calculating water consumption	Introduction to the Irrigation Engineering
4	Efficiency, sufficiency and consistency of irrigation	Introduction to the Irrigation Engineering
5	Land gradation design methods	Land gradation design
6	Surface irrigation process mechanism and water balance concept	Surface irrigation
7	Design assumptions in strip irrigation and design flow rate, strip length and width	Strip irrigation
8	Method of calculating absorption, design parameters, methods of controlling surface runoff	Furrow irrigation
9	Design equations in basin irrigation and design parameters	Basin irrigation
10	Sprinkler irrigation system diagram and effect of wind direction on the diagram	Sprinkler irrigation
11	Hydraulic sprinkler, distribution uniformity factor, and the sprinkler irrigation losses	Sprinkler irrigation
12	Number of pipes moves, hydraulic flow principles, and flow in the manifold	Sprinkler irrigation

13	Pressure charge calculation, sprinkler irrigation system design	Sprinkler irrigation
14	Benefits of trickle irrigation, basic parts of the drip system	Trickle irrigation
15	Wetness area, drip system design	Trickle irrigation