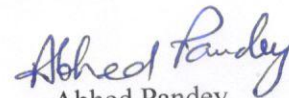


Course: Hi-tech Aquaculture Production Systems (AQC 601) (2+ 1)

Theory Lecture Schedule

S. No.	Topic	Lectures
1.	An overview of global aquaculture production	1
2.	Demand- consumption scenario and emerging trends	1
3.	Present status, Constraints and future prospects in India and the world	2
4.	Aquaculture practices indifferent parts of the world	2
5.	Enhancing carrying capacity in culture systems	1
6.	Principles of biofloc	1
7.	Different carbon sources, Design of aeration system and biofloc reactor	2
8.	Carrying capacity, C: N ratio, harvesting of biofloc, Biofloc quality and quantity	2
9.	Biofloc as feed ingredient, Stocking of fish and shellfish species	2
10.	Sludge removal, disposal of wastes and control of pollution to the environment	1
11.	Principles of closed system farming, RAS, Components	2
12.	Design of mechanical and biological filters for the water reuse system	1
13.	Design of RAS, biofiltration and nitrifiers	1
14.	Suitable cultivable species for indoor culture systems, polyhouses	1
15.	Principles, Components and design of different aquaponics systems, Components in aquaponics, ratio of fish and plants	2
16.	Water quality and system maintenance, Resource utilization, Nutrient recycling and zero discharge of nutrients	2
17.	Flow-through system, Raceways (IPR), IMTA	2
18.	Partitioned Aquaculture Systems (PAS), Aquamimicry systems	2
19.	Cluster farming, Organic farming, Satellite farming, co-operative farming and conservation aquaculture	2
20.	Network of production and marketing aspects, Economics of super intensive farming systems, Advantages and disadvantages	2

Total 32


Abhed Pandey

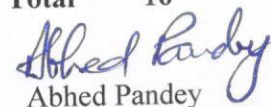
Associate Professor
Department of Aquaculture

Course: Hi-tech Aquaculture Production Systems (AQC 601) (2+ 1)

Practical Lecture Schedule

S. No.	Topic	Lectures
1.	Design, fabrication and performance evaluation of biofloc systems	2
2.	Different equipment in closed grow-out system	1
3.	Aerators & Biofilters	2
4.	RAS & Raceways	2
5.	IMTA, PAS and aquaponics systems	2
6.	Plankton and microbial analysis of biofloc	1
7.	Studies on different C:N ratio	1
8.	Nutrient analysis in aquaponics	1
9.	Visit to hatcheries with super-intensive models	1
10.	Identification and understanding the network of the systems	1
11.	Market analysis for the produces	1
12.	Analysis of economic advantages, case studies	1

Total 16



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