

**COLLEGE OF FISHERIES, KISHANGANJ
BIHAR ANIMAL SCIENCES UNIVERSITY, PATNA**

Lecture Plan

Course Title: Freshwater Aquaculture, AQC-111 (2+1)

Theory

Sl. No.	Course Title	No. of Lectures
1.	Major species cultured, production trends and prospects in different parts of the world	2
2.	Freshwater aquaculture resources-ponds, tanks, lakes, reservoirs etc	1
3.	Nursery, rearing and grow out ponds preparation and management-control of aquatic weeds and algal blooms, predatory and weed fishes, liming, fertilization/manuring, use of biofertilizers, supplementary feeding. Water quality management	5
4.	Selection, transportation and acclimatization of seed	2
5.	Traits of important cultivable fish and shellfish and their culture methods - Indian major carps, exotic carps, air-breathing fishes, cold water fishes, freshwater prawns, freshwater mussels	6
6.	Wintering ponds, quarantine ponds and isolation ponds	1
7.	Sewage-fed fish culture	2
8.	Principles of organic cycling and detritus food chain	1
9.	Use of agro-industrial waste and biofertilizer in aquaculture	1
10.	Composite fish culture system of Indian and exotic carps-competition and compatibility	1
11.	Exotic fish species introduced to India	2
12.	Culture of other freshwater species. Medium and minor carps, catfishes and murels	3
13.	Species of fish suitable for integrated aquaculture. Integration of aquaculture with agriculture /horticulture/ livestock.	2
14.	Cultivation of aquatic macrophytes with aquaculture (Makahana and Trapa)	1
15.	Paddy cum Fish/Shrimp Culture	1
	Total No. of Lectures	31

Practical

Sl. No.	Course Title	No. of Lectures
1.	Preparation and management of nursery, rearing and grow-out ponds.	2
2.	Study on the effect of liming, manuring and fertilization on hydrobiology of ponds and growth of fish and shellfishes	2
3.	Collection, identification and control of aquatic weeds, insects, predatory fishes, weed fishes and eggs and larval forms of fishes.	4
4.	Algal blooms identifications and their control.	1
5.	Estimation of plankton and benthic biomass.	2
6.	Study of contribution of natural and supplementary feed to growth	2
7.	Workout of economics of different culture practices.	1
8.	Estimation of live-stock requirement / unit in integrated aquaculture.	1
9.	Design of paddy plot for paddy-cum-fish culture	1
10.	Design of Fish and Shrimp culture, livestock shed on pond embankment	1
11.	Economics of different integrated farming systems	1
	Total No. of Lectures	18