

College of Fisheries, Kishanganj
Bihar Animal Sciences University, Patna
Lecture Plan (B.F.Sc. 5th Sem, Batch: 2023)

Course Title: Fish Toxicology

Course code & Credit hrs: AAHM-312; 2(1+1)

Course Assigned: Dr. Pushpa Kumari

Theory		
Sl. No.	Topics	No. of Classes
1.	General toxicology: Definitions, Branches of Toxicology, Historical developments.	1
2.	Classification of poison and types of poisoning	1
3.	Toxicity testing - Chronicity factor and untoward effects	1
4.	Common causes and diagnosis of poisoning	1
5.	Factors modifying toxicity	1
6.	Concept of toxicokinetics and toxicodynamics,	1
7.	General approaches to diagnosis and treatment of poisoning.	1
8.	Toxicity caused by metal and non-metals.	1
9.	Phytotoxins and toxic principles of various alkaloids and toxic plants	2
10.	Drug toxicity and toxicity caused by agrochemicals.	1
11.	Mycotoxins and Bacterial toxins.	1
12.	Collections and dispatch of specimens in toxicological cases.	1
13.	Toxicity of drugs in Aquaculture	1
14.	Maximum Residual Limits (MRL) of various drugs & chemicals in fish.	1
15.	Metabolism of toxic substances by aquatic organisms.	1
Total No. of classes		16
Practical		
1.	Detection of heavy metal poisoning	2
2.	Spot tests for metals	1
3.	Group reaction for metals	2
4.	Qualitative detection of Nitrite and Nitrate	1
5.	Detection of hydrocyanic acid	1
6.	Detection and Estimation of Mycotoxins	3
7.	Test for detection of phytotoxins	2
8.	Test for detection of alkaloids	1
9.	Estimation of LD ₅₀ and ED ₅₀ Demonstration of drug toxicity.	3
Total No. of classes		16

Signature of Course Instructor:

Name of Course Instructor: Dr. Pushpa Kumari