

COLLEGE OF FISHERIES, KISHANGANJ
BIHAR ANIMAL SCIENCES UNIVERSITY, PATNA

Lecture Plan

Course code: AAHM- 311

Course Title: Pharmacology

Credit hrs: 3 (2+1)

Programme: B.F.Sc.

Assigned Teachers: Dr Sudeshna Sarker & Mr. Pankaj Kumar

Theory	
Topics	No. of Classes
1. Introduction to Pharmacology: History, Importance, Terms and Definitions	2
2. Drug development	2
3. Screening and Nomenclature	1
4. Scope of pharmacology in fishes	1
5. Route of Administration and Method of application to fish	1
6. Source of Drugs	1
7. Pharmaco-therapeutic classification of drugs	2
8. Pharmacokinetics: Biological membrane, absorption, distribution, biotransformation and Excretion of drugs.	3
9. Factors influencing drug metabolism	1
10. Pharmacodynamics: Principles of drug action, concept of drug receptor, nature, chemistry, classification.	3
11. Functions of receptor. Transducer mechanism, second messenger, non-receptor mediated action.	2
12. Dose Response Relationship, half-life withdrawal period, potency, efficacy, threshold dose, therapeutic dose, maximal dose, toxic dose, lethal dose.	3
13. Factors modifying drug action	1
14. Adverse drug effects	1
15. Drug interaction and bioassay of drugs	1
16. Salient features in drug acting on digestive system, nervous system and cardiovascular system.	3
17. Drugs used in fish transportation	1
18. Recent advances in Pharmacology	1
19. Responsible use of drugs and chemicals in aquaculture advantage and Disadvantage	1
Total Number of classes: 31	
Practical	
1. Introduction to Pharmacy	1
2. Metrology	2
3. Prescription Writing	1
4. Preparation of drug solution	1
5. Source and chemical nature of drugs	1
6. Incompatibility	1
7. Pharmaceutical technology	1

8. Bioassay of drugs	2
9. Animal models in Pharmacological experiments	2
10. Methods of application of drugs in fish	2
11. Drug dose calculations	1
12. Feed formulations with drugs	1
Total Number of classes: 16	

Course Instructor