

Course Title: Fish Packaging Technology

Course Code: FPT-222

Credit Hours: 1+1

Course Teacher: Dr. Md. Aman Hassan

Lecture Plan

Theory

S.No.	Topics to be Covered	No. of classes
1	Introduction to packaging, importance of packaging in fish processing, functions, objectives and requirements	1
2	Packaging materials: basic materials and laminates, principles of their manufacture and their identification	1
3	Properties of packaging materials and their use in protective packaging, with special reference to food	1
4	Printing for packaging and print identification; closures of packaging, heat seals and bottle closure	1
5	Principles of packaging fresh produce handling and transportation; packaging for retail sale and storage	1
6	Packaging equipment and machinery; package design, evaluation and testing	1
7	Flexible packaging materials, rigid containers, thermoform containers and glass containers	1
8	Corrugated fibre boards, duplex cartons and edible packaging materials	1
9	Laminations and co-extrusions; retort pouch packaging—advantages and disadvantages	1
10	Biodegradable films, vacuum packaging, active packaging and modified atmosphere packaging (MAP)	1
11	Polymeric packaging and its applications in fish and fishery products	1
12	Packaging requirements of fresh fish, frozen fish and canned fish	1
13	Transport worthiness of packaging materials and accelerated shelf testing	1
14	Materials and their safe use in food-contact applications	1
15	Safety and legislation aspects of packing	1
16	Labelling and bar coding	1
Total		16

Practical

S.No.	Topics to be Covered	No. of classes
1	Determination of grammage of paper and board	1
2	Determination of bursting strength and burst factor of paper and board	1
3	Determination of puncture resistance of packaging materials	1
4	Determination of waterproofness of packaging materials	1

5	Determination of stiffness and ring stiffness of paper and board	1
6	Determination of flat crush strength of packaging materials	1
7	Determination of tensile strength and elongation at break of plastic films	1
8	Determination of density of plastic films	1
9	Determination of breaking length of paper and board	1
10	Determination of impact strength of plastic films	1
11	Determination of tearing strength of paper and plastic films	1
12	Determination of water vapour transmission rate (WVTR)	1
13	Determination of oxygen transmission rate (OTR)	1
14	Determination of heat seal strength	1
15	Evaluation of suitability of plastic films for food-contact applications and evaluation of retort pouch	1
16	Identification of plastic films	1
Total		16