

Course Contents:

Fish morphology and Biology: Brief account of Fish morphology and Biology; Warm water / cold water culturable fishes; Fish culture practices; Extensive/Semi intensive/intensive fish culture;

Fish Farm management: Brief accounts of fish pond, fish stocking, water quality; manuring, feeding and harvesting.

Fish Health Management: Introduction to fish diseases; disease process; causes of disease. Effects of diseases;

Fish Diseases: A general account of Infectious diseases; (Viral; Bacterial fungal; parasitic diseases) Noninfectious diseases. (Nutritional; Genetics; Pollution; Environmental; Physical damage)

Control of fish diseases: Prevention; Therapy, management; Methods of disease control in fishes; Treatment of fish diseases. Diagnosis to action; Types of treatment; Methods of treatment; Strategies for treatment; Chemicals and drugs for fish health.

Teaching-Learning Strategies

Teaching will be a combination of class lectures, class discussions, and group work. Short videos /films will be shown on occasion.

Assignments

The sessional work will be a combination of written assignments, class quizzes, presentation, and class participation/attendance.

Assessments and Examination

Sessional Work: 25 marks

Midterm Exam: 35 marks

Final term Exam: 40 marks

Books Recommended:

1. Post, G.W. 1988. Textbook of fish health. T.F.H. publications Inc. USA. (**Textbook**)
2. Bauer, O.N., Musselius, V.A. and Strelkov, Yu.A. 1973. Diseases of pond fishes. Keter press, Jerusalem.
3. Hool, D. et al., 2001. Diseases of carp and other cyprinid fishes. Fishing News Books, UK.

4. Legler, K.E., Bardach, J.E., Miller, R.R. and Maypassino, D.R. 2003. Ichthyology (2nd Ed.) John Wiley, UK.
5. M. Huet, 1986. Text book of Fish culture, breeding and cultivation. Fishing book news Ltd.
6. Woo, 1995. Fishes diseases and disorders, Protozoan and Metazoan infections. Pak Book corporation
7. Noga, E.J. 2010. Fish Diseases. Diagnosis and treatment. 2nd Ed. Wiley and Blackwell, USA.
8. Boyd and Tucker, 1998. Pond Aquaculture and water quality management. Springer, India.

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Fish Disease and Health Management(Lab.)

Cr. (1)

Course Contents:

Dissection of culturable carp; sampling of fish for diagnostic purpose. Study of fish for parasitic, fungal and bacterial diseases. Preparation of slides of parasites. Visit to a fish farm. Preparing a diagnostic report of diseased fish sample.

Teaching-Learning Strategies

Teaching will be a combination of class lectures, class discussions, and group work. Short videos /films will be shown on occasion.

Assignments

The sessional work will be a combination of written assignments, class quizzes, presentation, and class participation/attendance.

Assessments and Examination

Sessional Work:	25 marks
Midterm Exam:	35 marks
Final term Exam:	40 marks