

Programme: M.Sc. (Marine Microbiology)

Course Code: MMO 113

Title of the Course: MARINE ENVIRONMENT AND PUBLIC HEALTH MANAGEMENT [P]

Number of Credits: 1

Effective from Academic Year: 2018-19

Prerequisites	It assumed that students have basic knowledge about marine environment, climate change, pollutants in marine environment and basic microbiology techniques.	
Objective:	This course develops concepts in sampling of marine polluted areas and equipments required for sampling, Marine pollutant estimation protocols/ strategies, aquaculture sanitiser and methods to check its efficacy, characterization of pathogenic organisms from marine environment.	
Content:		(24)
1.	Estimation of major pollutants (one aromatic halide) using spectrophotometry.	
2.	Testing the efficacy of aquaculture sanitizer (phenol).	
3.	Microbial pollution of water, detection and characterization of different indicator and pathogenic organisms such as <i>S. aureus</i> , <i>E. coli</i> , <i>V. cholerae</i> , <i>Salmonella</i> , <i>Shigella</i> , by conventional and rapid methods.	
Pedagogy:	Experiments in the laboratory	
References/ Readings	As given under Theory Course MMO 108-T	
Learning Outcomes	1)How to do Sampling from different marine polluted sites and sampling equipment. 2)Students will learn monitoring, Estimation and management of major marine pollutants in marine environments. 3) Management of bacterial pathogens in marine environment.	