

Programme: M. Sc. (Marine Sciences)

Course Code: MSO 373

Title of the Course: Marine Microbial Ecology Practical I

Number of Credits: 01

Effective from AY: June 2018-19

Prerequisites for the course:	Students who have undergone semester I and II of Marine Sciences.
Objective:	This course elucidates the basic concepts and techniques applied in the Marine Microbiology

Content:	<ol style="list-style-type: none">1. Sterilization techniques, preparation of bacterial media, nutrient, broth & agar preparation of slants (6 hrs; Ref 1);2. Method of sample collection (water) from marine environment (4 hrs; Ref 2),3. Estimation of bacterial, fungal population and isolation (6 hrs; Ref 4)4. Preservation of cultures, isolation of pure cultures microscopy: wet mounts (4 hrs; Ref 4),5. Isolation of pathogenic organisms from water and sediments (4 hrs; Ref 5)	24 hours
Pedagogy:	Microbial laboratory techniques	
References/ Readings	<ol style="list-style-type: none">1. Bergeys manual of systematic bacteriology (Vol. I), 1984 - (William & Willcens, Baltimore, MD, 518 pg2. Marine and estuarine microbiology laboratory manual, 1975 – Rita R. Colwell – University Park Press, 1975, 96 pgs.3. Marine microbiology, a monograph & hydro-bacteriology, 1946 - C.E. Zobell, – Chronica botarica Compare, 240 pgs.4. Laboratory methods in microbiology, 1966 - W.F. Harigan, M.E. Mc Cance, Academic press 1966, 362 pgs.5. Manual of environmental microbiology, 1997 - G. J. Hurst , G. R. Knudsen, AsM Press, 894 pgs.	
Learning Outcomes	To acquaint with some of the basic methods/techniques to study the microbiology of marine environment.	