

Name of the Programme: M. Sc.Marine Sciences

Course Code: MSC 532

Title of the Course: Marine Pollution Practical

Number of Credits: 01

Effective from AY: 2022-23

Prerequisites for the course:	Core courses offered in the Semester I.	
Objective:	To analyze the concentration of various pollutants in the seawater and their effect on marine life including BOD and COD to assess the impact of organic pollution.	
Content:	Determination of dissolved oxygen in polluted waters. (5 hours; Reference 1) Determination of biochemical oxygen demand in polluted waters. 5 hours; Reference 1) Determination of chemical oxygen demand in polluted waters. (5 hours; Reference 2) Pre-concentration of water for estimation of trace metals by AAS (5 hours; References 5, 6, 7) Estimation of Cd in polluted waters and biological sample. (5 hours; References 5, 6, 7) Estimation of Cu in polluted waters and biological samples. (5 hours; References 5, 6, 7)	30 hrs.
Pedagogy:	Demonstrations/ Lab experiments.	
References/ Readings:	1.Martin, D.F (1972). Marine Chemistry (01). Academic Press, London. 2.Rice, E.W and Bridgewater L. American (2012). Standard methods for the examination of water and waste water analysis (22nd edition), Public health association, Washington DC. 3.Grasskhoff, K, M (1983). Methods of Seawater analysis. Ehrhardt and K. Krembling (eds.), Verlag Chemie, Weinheim. 4.Strickland, J.D.H, and Parsons, T.R (1972) A practical hand book of seawater analysis. Fisheries Board of Canada bulletin. (2nd edition). 5.Riley, J. P. and Skirrow, G (1975). Analytical chemistry of seawater, In Chemical Oceanography (03), Riley, J. P. and Skirrow, G (eds.). Academic Press, London. 6.Allen, S. E., Grimshaw, H. M., Parkinson, J. A., Quarmby, C. and Roberts, J. D. (1976). Chemical Analysis. In: Methods in plant Ecology, S. B. Chapman (eds.), Blackwell Scientific Publications, Oxford, Chapter 8.	
Course Outcome:	1. To apply the results of analyses of different pollutants to draw valid inferences affecting marine life.	