Name of the Programme: M. Sc.Marine Sciences
Course Code: MSC 511
Title of the Course: Estuarine and Coastal Chemistry Practical
Number of Credits: 01
Effective from AY: 2022-23

Prerequisites for the course:	Core courses offered in the Semester I.	
Objective:	To demonstrate the experiment involving analytical chemistry of the seawater.	
Content:	1. Spectrophotometric determination of dissolved inorganic phosphate in estuarine water by ammonium molybdate – ascorbic acid method (6 hours; Reference 1) 2. Spectrophotometric determination of nitrite in estuarine water by sulphanilamide – diamine method (6 hours; References 1, 2) 3. Spectrophotometric determination of nitrate in estuarine water by reduction to nitrite using copper – coated cadmium reduction column (6 hours; Reference 1) 4. Spectrophotometric determination of ammonia in estuarine water by indophenol blue method (6 hours; References 1, 3) 5. Spectrophotometric determination of dissolved inorganic silicate in estuarine water by ammonium molybdate – ascorbic acid – oxalic acid method (6 hours; Reference 1)	30 hrs.
Pedagogy:	Laboratory experiments/ field studies	
References/ Readings:	1.Grasshoff, K., Ehrhardt, M., Kremling, K. (1983). Methods of Seawater Analysis. VerlagChemie, Weinheim. 2.Ewing, G. W. (1981). Instrumental Methods of Chemical Analysis. NY: McGraw-Hill. 3.Parsons, T. R., Maita, Y., Lalli, C. M. (1984). A Manual of Chemical and Biological Methods for Seawater Analysis. Oxford: Pergamon Press.	
Course Outcome:	1. To develop analytical skills to determine the concentrations of micro-nutrient elements (P, N and Si) in estuaries/ aqueous systems.	