Name of the Programme:M. Sc.Marine Sciences
Course Code: MSC 503
Title of the Course: Marine Chemistry Practical
Number of Credits: 01
Effective from AY: 2022-23

Prerequisites for the course:	Degree of Bachelor of Science of this University or an examination of any other university recognized as equivalent.	
Objective:	This course deals with the analytical chemistry of the Seawater.	
Content:	Estimation of salinity of seawater by the Mohr- Knudsen chlorinity titration method (5 hours; Reference 1) Estimation of salinity of seawater by Harvey's method (5 hours; References 1, 3, 4) Determination of dissolved O_2 of seawater by Winkler's iodometric titration method (5 hours; Reference 1) Determination of pH of seawater by potentiometric method using pH meter and determination of total alkalinity of seawater by potentiometric titration using pH meter (5 hours; Reference 1) Estimation of carbonate and bicarbonate alkalinity by titrimetric method (5 hours; Reference 4) Spectrophotometry: Verification of Beer's law (5 hours; Reference 2)	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 4.Biological Methods for Seawater Analysis. Oxford: Pergamon Press. Martin, D. F. (1972). Marine Chemistry. NY: Marcel Dekker.	
Course Outcomes:	1. To develop analytical skills to determine the concentrations of various chemical parameters.	